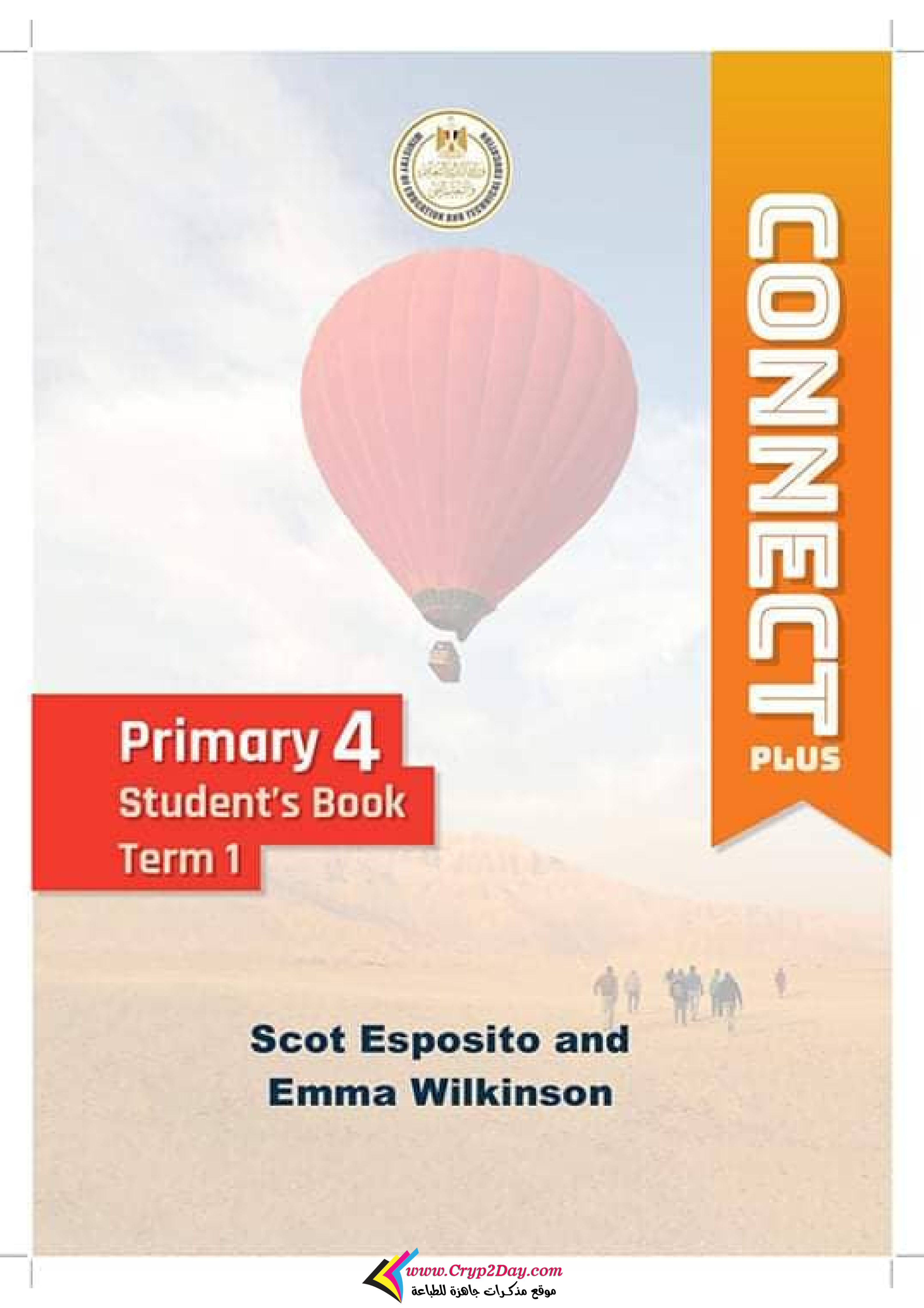

CONNECT
PLUS
Primary 4
Student's Book
Term 1
Scot Esposito and
Emma Wilkinson
www.Cryp2Day.com
موقع مذكرات جاهزة للطباعة

Foreword

This is a pivotal time in the history of the Ministry of Education and Technical Education (MOETE) in Egypt. We are embarking on the transformation of Egypt's K-12 education system (Education 2.0) starting in September 2018 with KG1, KG2 and Primary 1, continuing to be rolled out year after year until 2030. We are transforming the way in which students learn, to prepare Egypt's youth to succeed in a future world that we cannot entirely imagine. The rapid technological advancement and disruptions to industries and the workplace requires MOETE to undergo a major configuration of when to learn and what to learn. The foundational skills of literacy, numeracy and digital literacy are the core. Education at a young age also needs to be multidisciplinary to broaden students' horizons, integrating the essential soft skills and competencies such as communication and critical thinking into the school curriculum. There must be joy in learning so that students are motivated to engage in lifelong learning throughout their lives, keeping up and staying ahead of changes in the world.

Curriculum is not the end but the beginning of the important process of changing Egypt's education system. MOETE is very proud to present this new series of textbooks, *Connect Plus*, with the accompanying digital learning materials that capture its vision of the transformational journey. This is the result of much consultation, much thought and a lot of work. We have drawn on the best expertise and experience from national and international organizations and education professionals to support us in translating our vision into an innovative national curriculum framework and exciting and inspiring print and digital learning materials.

The MOETE extends its deep appreciation to its own Center for Curriculum and Instructional Materials Development (CCIMD) and specifically, the CCIMD Director and her amazing team. MOETE is also very grateful to the minister's senior advisors for curriculum and early childhood education. Our deep appreciation goes to Discovery Education, Nahdet Masr, Longman Egypt, UNICEF, UNESCO, World Bank Education Experts and UK Education Experts who, collectively, supported the development of Egypt's national curriculum framework. I also thank the Egyptian Faculty of Education professors who participated in reviewing the national curriculum framework. Finally, I thank each and every MOETE administrator in all MOETE sectors as well as the MOETE subject counsellors who participated in the process.

This transformation of Egypt's education system would not have been possible without the significant support of Egypt's current president, His Excellency President Abdel Fattah El-Sisi. Overhauling the education system is part of the president's vision of 'rebuilding the Egyptian citizen' and it is closely coordinated with the Ministries of Higher Education and Scientific Research, Culture, and Youth and Sports. Education 2.0 is only a part in a bigger national effort to propel Egypt to the ranks of developed countries and to ensure a great future to all of its citizens.

A Word from the Minister of Education and Technical Education

It is my great pleasure to celebrate this extraordinary moment in the history of Egypt where we launch a new education system designed to prepare a new Egyptian citizen proud of his Egyptian, Arab and African roots - a new citizen who is innovative, a critical thinker, able to understand and accept differences, competent in knowledge and life skills, able to learn for life and able to compete globally.

Egypt chose to invest in its new generations through building a transformative and modern education system consistent with international quality benchmarks. The new education system is designed to help our children and grandchildren enjoy a better future and to propel Egypt to the ranks of advanced countries in the near future. The transformation of the Egyptian citizen is Egypt's national project for the years to come and it is the only safeguard for a prosperous future.

The fulfillment of the Egyptian dream of transformation is indeed a joint responsibility among all of us; governmental institutions, parents, civil society, the private sector and media institutions. Here, I would like to acknowledge the critical role of our beloved teachers who are the role models for our children and who are the cornerstone of the intended transformation.

I ask of every one of us to join hands towards this noble goal of transforming Egypt through education in order to restore Egyptian excellence, leadership and its great civilization.

My warmest regards to our children who will begin this journey and my deepest respect and gratitude to our great teachers.

Dr. Tarek Galal Shawki
Minister of Education and Technical Education

Contents

SCOPE AND SEQUENCE

Theme 1 I discover myself

	Unit 1 What can I do?	Unit 2 Plants and animals	Unit 3 My world
Vocabulary	body systems: *bone, blood, heart, lungs, muscles, skeleton, stomach, swallow*	animals: *amphibian, arachnid, bat, bird, fish, invertebrate, mammal, reptile, species, vertebrate; beak, fin, fur, gill, scales; crab, dragonfly, grasshopper, jellyfish, octopus, snail, squid* Comparative and superlative adjectives; adverbs	my local area: *community, neighborhood, citizenship* history: *dynasty, hieroglyphs, pharaoh, scribe* governorates of Egypt, capital city music: *clapping, ney, oboe, oud, qanun, rebaba, shabbaba, simsimeya, string instrument, wind instrument*
Language	Mom wants to tidy the lounge. Capital letters: *English, Egypt, Braille*	*An Asian elephant is smaller than an African elephant.* *The biggest animal in the world lives in the sea.* *Some invertebrates can swim very well.*	*This is my neighborhood. It's mine.* *That's your bike. It's yours.* *Important dynasties ruled Egypt for many years.*
Reading	A text about senses	Texts about animal classification; a text about animal sizes	A text about the history of ancient Egypt; texts about folk music and folk dancing
Writing	Choosing a suitable title for a text; a paragraph about a healthy lifestyle; notes to plan activities	Practicing dictionary skills; writing about advantages and disadvantages; a habitat report	Describing your community; a paragraph describing folk music or dance
Speaking	A dialog about physical and creative activities	A *True or False* game; discussion about colors; description of a picture	Talking about where you live; group work to make a tourist information guide
Listening	Interviews with children talking about senses; information about Paralympic athletes	Facts about animals; facts about under the sea world	Children describing their communities; information about governorates; musical instruments
Life skills	**Self-management**: eating healthily, living a healthy life **Respect of diversity**: differently-abled people	**Critical thinking**: considering advantages and disadvantages **Collaboration**: pairwork about a micro-habitat	**Respect for diversity**: the different governorates of Egypt **Communication**: a tourist information guide
Values	**Appreciation of science** **Tolerance**	**Appreciation of science**	**Curiosity** **Participation**
Issues and challenges	**Preventative and therapeutic health** **Non-discrimination issues**	**Environmental responsibility**	**Loyalty and belonging** **National unity** **Awareness of duties and rights**
Integrated cross-curriculum topics	**Social studies**: a healthy lifestyle **Science**: body systems; senses	**Science**: classification of animals **Art**: primary and secondary colors	**Social studies**: ancient Egyptian history; the governorates of Egypt **Music**: traditional Egyptian music and dance

Theme 2 Myself and others

	Unit 4 City and country	Unit 5 Resources in our world	Unit 6 Let's work
Vocabulary	places: *city, congestion, densely populated, sparsely populated, inhabitant, isolated, metropolitan, pedestrian, rural, services, traditional, urban, village* irregular plurals: *babies, buffaloes, children, geese, men, people, potatoes, sheep, tomatoes, women* craft: *artisan, carpet, dye, spin, warp, yarn*	Natural resources: *renewable, non-renewable; coal, crude oil, fossil fuel, metal, mineral, natural gas, oil well, petroleum, plastic, soil, stone, water, wood* *wave power, wind power, tidal power, metropolitan, solar power, solar energy, electrical energy, mechanical energy* Careers: *application, career, experience, promotion, skill, talent, train*	Transportation: *air, pipe, rail, road, water* *career, podcast, search engine, browser, specific, passphrase, characters, relaxing, containers, Suez Canal, ship's captain, wave, entrepreneurs*
Language	*Every time I look at it, I remember how much work and skill it takes to make just one carpet.* *My grandma took me to a workshop so that I could learn about this craft.* *These artisans only use natural vegetable dyes, although some other workshops use synthetic dyes.*	*The baby cries when she's hungry.* *Lara did her science project on global warming.* *Wael did his science project on tidal power.* *The baby cries when she's hungry.* *Both children presented their projects on Thursday.*	*People will travel to Mars for vacation in 2052.* *My parents won't buy a self-driving car next year.* Punctuation marks: *comma, exclamation point, period, question mark, apostrophe*
Reading	A text about cities and villages A text about visiting a carpet workshop; a text about a city	A factual text about natural resources; a text about renewable energy	A literary text about economic activity; a factual text about passwords; a paragraph about natural resources
Writing	Sentences with subordinating conjunctions; a text about your city; a description of a design	an email to apply for a job; notes about a design	A diagram about tech jobs; structuring a paragraph; a chart to make a plan
Speaking	Describing where you live	Describing natural resources; a discussion about teamwork	Asking and answering about types of transportation; presenting a business plan
Listening	Descriptions of a city and a village; an interview about different places	A discussion about fossil fuels; a job interview	Children talking about transportation; a podcast about tech jobs; information about search engines
Life skills	**Creativity**: design a new area of smart growth for a city	**Collaboration**: how to be a good team member **Critical thinking and creativity**: design a vehicle that runs on a renewable energy source	**Collaboration, accountability and decision making**: creating and presenting a business plan
Values	**Curiosity** **Objectivity**	**Respect** **Work ethics**	**Independence**
Issues and challenges	**Citizenship** **Sustainable development**	**Environmental responsibility** **Sustainable development** **Entrepreneurship**	**Citizenship / Entrepreneurship** **Technological awareness**
Integrated cross-curriculum topics	**Social studies**: places in town; giving directions; traditional crafts **Math**: multiplying and dividing numbers; adding and subtracting fractions **Art**: traditional crafts	**Social studies**: renewable and non-renewable resources **Science**: the role of science in improving people's lives	**Social Studies**: transportation services **Career education**: making a business plan **ICT**: search engines and strong passwords

LET'S REMEMBER!
LESSON 1

1 **Write the words in the correct group**

bandage caption chimpanzee compass crutches fiber grassland headline macaw magnet nutrients oasis spring teenager toddler wetland

1 polar, desert, ____________, ____________
2 adult, baby, ____________, ____________
3 article, advertisement, ____________, ____________
4 vitamins, protein, ____________, ____________
5 first-aid kit, syringe, ____________, ____________
6 lake, river, ____________, ____________
7 needle, pole, ____________, ____________
8 sloth, cheetah, ____________, ____________

2 **Listen and write**

1

This is a bracelet. It's made of wood.

2

____

3

____

4

____

5

____

6

____

3 **Order and write**

1. used / to / We / go / Saturdays / museum / the / on / to
   We used to go to the museum on Saturdays.
2. like / What / it / does / taste / ?
3. too / water / There's / cup / much / the / in / .
4. sometimes / after / They / swimming / school / go / .
5. fast / run / you / How / can / ?

4 **Listen and number**

a

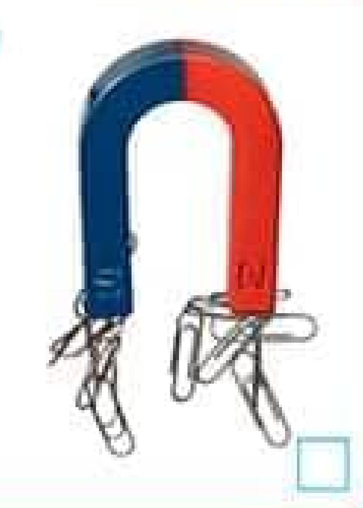
b

c

d

1

e

f


LESSON 2

1 Read and check (✓) or cross (✗)

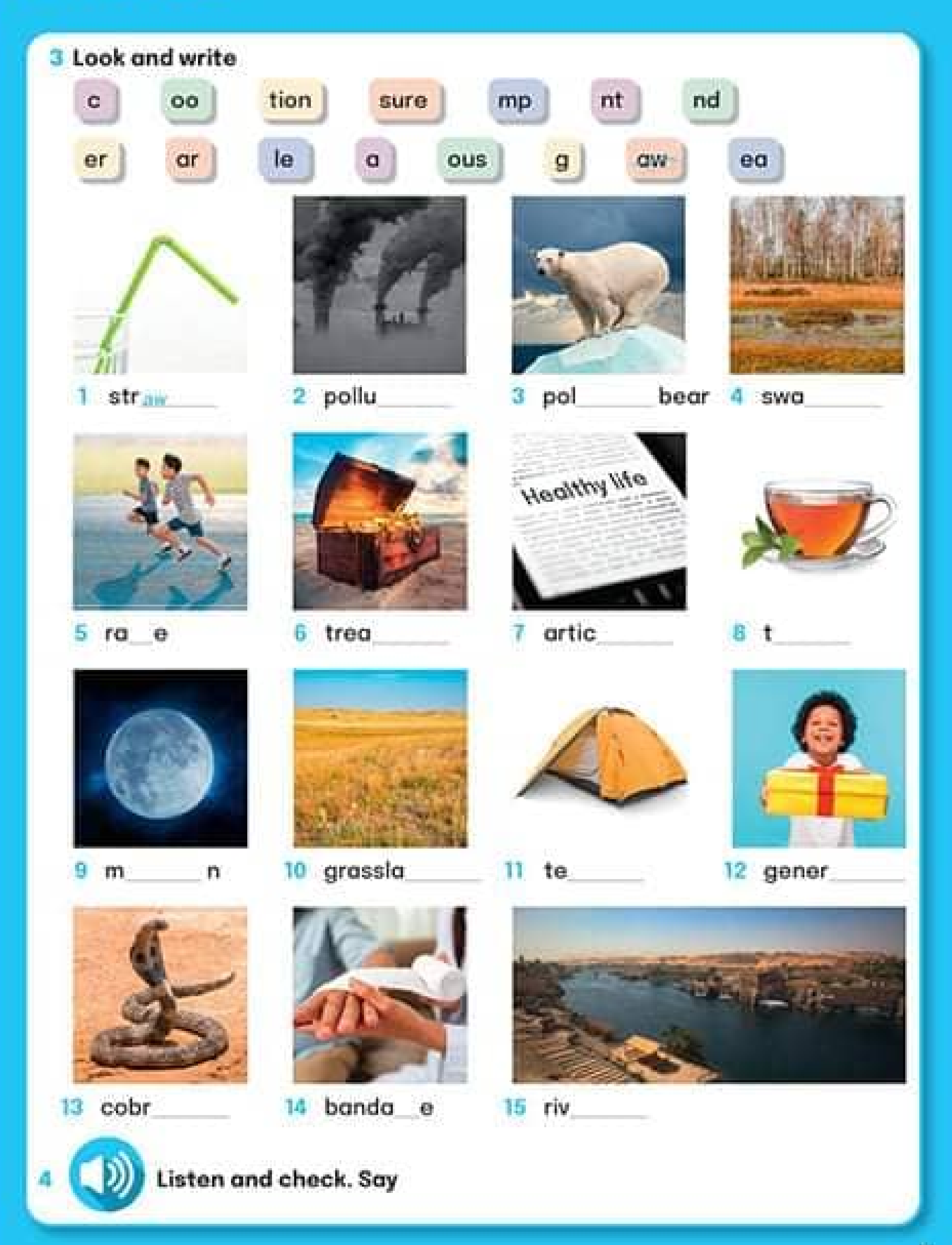
1 When you ride a bike, you need a helmet to protect your knees. ☐
2 When you stay positive, you feel happy. ☐
3 All living things need water. ☐
4 There isn't any sugar in fruit. ☐
5 A newborn kitten is about six months old. ☐
6 One teaspoon has four grams of sugar. ☐
7 Hydroponic farming uses only soil, not water, to grow plants. ☐
8 There is salt water in an oasis. ☐

2 Read and complete

course diseases interview scans many article

Fares Hello! Can I 1 ________ you for our school newspaper?
Doctor Yes, of 2 ________!
Fares Thank you! I'm writing an 3 ________ about the new hospital. Is it very big?
Doctor Yes, it is. It can help lots of patients to get better from injuries and 4 ________.
Fares That's great. How 5 ________ doctors and nurses work there?
Doctor Oh, I don't know exactly, but there are a lot.
Fares Do you think it was important to build a new hospital?
Doctor Yes, I do. The old hospital was quite small. Now we have lots of new equipment, so we can do more 6 ________ and surgery.
Fares That's fantastic. Thank you for your help.

PHONICS



3 Look and write

c   oo   tion   sure   mp   nt   nd

er   ar   le   a   ous   g   aw   ea

1 str aw____
2 pollu____
3 pol____ bear
4 swa____
5 ra__e
6 trea____
7 artic____
8 t____
9 m____n
10 grassla____
11 te____
12 gener____
13 cobr____
14 banda__e
15 riv____

4 Listen and check. Say

UNIT
1
What can
I do?

UNIT 1

In this unit I will ...

- understand important systems in my body.
- learn about my brain.
- form and use regular and irregular present simple verbs.
- read about our senses.
- practice when to use capital letters.
- choose and write a title for a text.
- plan activities for a summer camp.

Look and discuss

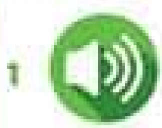
1 What is the child doing in the photo?
2 What parts of the body do you know?
3 What can different parts of the body do?
4 Is it important to have enough sleep? Why?
5 How much do you sleep every night?

Did you know?

To be active in the day, we need a good diet, plenty of water, and enough sleep. Children aged 7-12 need eleven hours of sleep a night.

Find out

How much water should children drink each day?



LESSON 1
MY BODY

1 Listen and read

Digestive system

We use our digestive system when we eat and drink. We **chew** and **swallow** food, then it goes to our **stomach**. In the stomach, a special liquid changes the food into energy and nutrients that we need in our bodies.

Respiratory system

We use our respiratory system when we breathe. We breathe in air through our nose, and it goes to our **lungs**. In the lungs, the oxygen in the air is passed to the **blood**. Our **heart** pumps this blood around our body.

Bones and muscles

Our **skeleton** is made up of all the **bones** in our body. These make us strong and protect our organs. **Muscles** are attached to our bones, and they lift and turn bones to make us move.

2 Read again. Match and write the text titles

1

______

2

______

3

______

3 Match

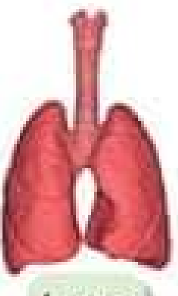
1 When we eat and drink,
2 When we breathe,
3 When we move,

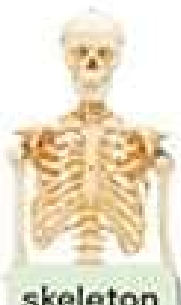
a we use our bones and muscles.
b we use our digestive system.
c we use our respiratory system.

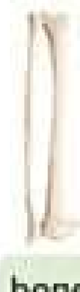
4 Listen and say

heart

stomach


lungs


skeleton


bone

muscle

blood

5 Ask and answer the questions with a partner

1 Where does food go after we swallow it?
2 Where is oxygen passed to the blood?
3 What do we have to protect our organs?

Did you know?

There are about five liters of blood in the human body.

UNIT 1

LESSON 2
OUR SENSES

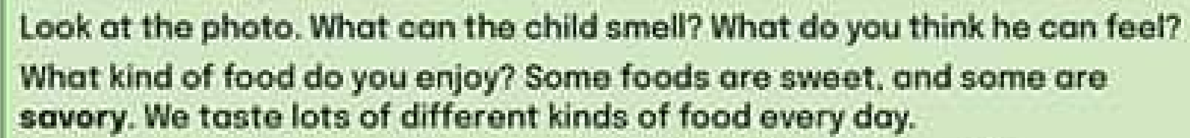
1 Match the senses to the parts of the body

1 sight	a tongue
2 taste	b eyes
3 touch	c ears
4 smell	d skin
5 hearing	e nose

2 Read the text. How do we use our different senses?

We use our senses every day to help us understand the world around us. We use our eyes to see and our ears to hear. We smell with our nose, taste with our tongue, and we can feel with our skin.

Think about where you are now. What can you see? What can you hear? Our senses are working all the time and they take in a lot of information.



Look at the photo. What can the child smell? What do you think he can feel?

What kind of food do you enjoy? Some foods are sweet, and some are **savory**. We taste lots of different kinds of food every day.

Some people cannot see or hear, so they have different ways to communicate. People who are deaf or have difficulty hearing can learn sign language. It is a complete language, like English, Arabic or Spanish, and there are different versions of it around the world - sign language in Egypt is different from sign language in the USA.

Braille is a code which people who are blind or have difficulty seeing can use to read. It has different **combinations** of dots. They can be a letter, number, punctuation mark or word. The person reading can touch the dots to find out what they mean. Braille was invented by Louis Braille.

3 Read the text again. Label the photos

1 ____________

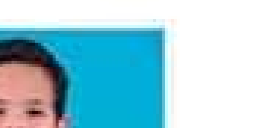
2 ____________

4 **Listen and write the sense**

1 ______________

2 ______________

3 ______________



4 ______________

5 ______________

5 **Look at the text on page 10 again. These words have capital letters. Why?**

1 English, Arabic, Spanish ______________
2 Egypt, USA ______________
3 Louis Braille ______________

6 **Rewrite the sentences with capital letters**

1 i live in aswan in egypt.

____

2 yusuf speaks arabic and english.

____

3 my teacher is called mrs heba.

____

UNIT 1

LESSON 3 LANGUAGE

1 **Work with a partner. Ask and answer. What do you like to do at the weekend?**

2 **Read the story. What do Adam and Kareema like to do?**

'It is Saturday, so there's no school. What are we doing today, Mom?' asks Kareema.

'We have to tidy the lounge. Then you can choose what you want to do,' says Mom.

Kareema's brother Adam smiles. 'I know what I want to do!' he says. 'Let's go to the park. We can run and play. I want to practice football.'

Kareema looks disappointed.

'What's the matter?' asks Mom.

'I like the park,' Kareema answers. 'But I want to do something creative this afternoon. I would like to draw or paint a picture. Adam goes to the park every week.'

'Kareema always does drawing!' says Adam.

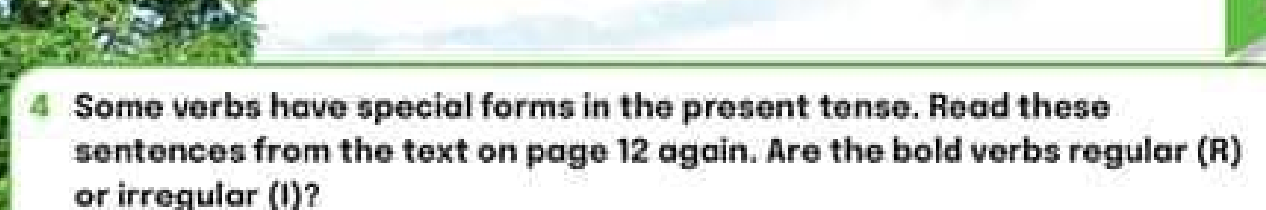
Mom smiles. 'I think we can all be happy today. Let's go to the park. We can play there and we can take pencils and paper with us. You can draw in the park, too. But first, let's tidy the lounge.'

3 **Read again and circle**

1 Mom wants to tidy the **lounge / kitchen**.
2 Adam wants to **draw / run** in the park.
3 Kareema wants to do something **happy / creative**.
4 At the park, the children can **play / draw / play and draw**.
5 The family will tidy **after / before** they go to the park.

Did you know?

Our brain controls how we move, what we remember, and the choices we make. The three main areas of the brain are the **cerebrum**, the **cerebellum** and the brain **stem**, and they all have important jobs. The cerebrum controls our senses, thoughts, how we speak, and our memories. The cerebellum controls movement and balance. The brain stem joins the two parts of the brain.



4 **Some verbs have special forms in the present tense. Read these sentences from the text on page 12 again. Are the bold verbs regular (R) or irregular (I)?**

1 It **is** Saturday, so there's no school. ___I___
2 What **are** we doing today, Mom? ______
3 Kareema's brother Adam **smiles**. ______
4 Kareema **looks** disappointed. ______
5 Adam **goes** to the park every week. ______
6 Kareema always **does** drawing! ______

Did you know?

There are two halves, or **hemispheres**, in our brain. The **left hemisphere** is important for math, science, and solving problems. We use the **right hemisphere** in creative activities such as art and music.

5 **Write in the present simple**

1 **a** They / be / tired ___They are tired.___
b I / be / happy ______
c She / be / hungry ______
2 **a** I / have / one brother ______
b Tarek / have / two sisters ______
3 **a** We / do / cookery / class ______
b Hana / do / art / class ______
4 **a** We / play / tennis / after school ______
b Noura / play / volleyball / on Mondays ______

6 **Look and label the pictures**

right hemisphere left hemisphere math and science art and music

1 We use the ______ of the brain for ______.

2 We use the ______ of the brain for ______.

UNIT 1

LESSON 4 PARASPORTS

1 Listen and read. What three types of medals are in the text? What do you think they mean?

The **Paralympic Games** is an international competition for athletes with disabilities. Like the Olympics, it takes place every four years, and is held in a different country each time. **Parasports** is an important area in sports, and Egypt has many athletes who take part in these competitions.

Aya Ayman Abbas

Aya Ayman Abbas is a swimming **champion** who has won the Egypt Cup three times. She was the first female Egyptian Paralympic swimmer in Rio in 2016. She has won lots of gold, silver and bronze medals in many different countries.

Mostafa Fathalla is a runner who takes part in 100-meter, 200-meter and 400-meter races. He joined the national team in Egypt in 2006, and has taken part in lots of international competitions. He has won many medals, including gold in the World Championship in New Zealand.

Mostafa Fathalla

Ahmed Abdel Fattah plays sitting volleyball. He took part in the 2016 Rio Paralympics, where the team won bronze. He has played with his team in Africa and Brazil and they have won many international competitions for Egypt.

Ahmed Abdel Fattah

Being a Paralympic or Olympic athlete takes years of **dedication** and hard work. Not everyone can get to this level, but there are many opportunities for everyone to take part and have fun doing a sport they enjoy.

2 Read again and choose *yes* or *no*

1 The Paralympics is held every year. **yes / no**
2 People from all over the world can take part in the Paralympics. **yes / no**
3 The Paralympics is held in the same place. **yes / no**
4 You need to work hard to take part in parasports. **yes / no**
5 No Egyptian female athlete took part in parasport competitions. **yes / no**

3 Work in pairs. Think and role-play

- Choose one athlete each.
- Think about how often you train.
- Tell your partner what you do.

I'm Aya Ayman Abbas. I'm a swimmer ...

UNIT 1

LESSON 5
WRITING PARAGRAPHS

1 Read the texts and choose the best title. There are two titles you don't need

Do sports every day! | Tips for a healthy diet | Unhealthy habits | How to start an exercise routine | Why you need to eat fruit

1 ______________________

Starting an exercise routine is hard, but it's a good idea to try to do some exercise three to five times a week. It's easier if you find a sport you enjoy doing, perhaps something you can do with friends. Find a time that is easy for everyone in your family.

2 ______________________

Eating the right food is very important for our health. We need a range of different kinds of food, with lots of vitamins and minerals. We shouldn't eat too much sugar or fat, and fruit and vegetables are healthy choices. It's important to drink lots of water, too, especially on hot days.

3 ______________________

It's fun to play video games sometimes, but it's good to be active as well. Sitting still for a long time isn't good for your health. Sometimes people eat more unhealthy snacks when they are watching TV or playing on the computer. Try not to develop unhealthy habits.

2 Choose one of the extra titles from Exercise 1. Write a paragraph.

Writing tip!

When you choose a title for a text, you need to summarize what it is about in a quick and clear way. You don't need any extra or unimportant information. It's a good idea if you can make it funny or interesting, too.

3 **Read this paragraph from the text on page 16 again. How many sentences does it have?**

Did you know?

A paragraph is made up of several sentences (3-8 sentences). A paragraph contains a **topic sentence**, **main (body)** sentences and a **conclusion** sentence.

It's fun to play video games sometimes, but it's good to be active as well. Sitting still for a long time isn't good for your health. Sometimes people eat more unhealthy snacks when they are watching TV or playing on the computer. Try not to develop unhealthy habits.

4 **Read again and follow the instructions**

1 Underline the introduction sentence in red.

2 Underline the conclusion sentence in blue.

3 Underline the main sentences in yellow.

5 **Read and match**

1 The introduction sentence	☐	a This sentence is last. It finishes the paragraph.
2 The main sentences	☐	b This sentence is first. It introduces the topic.
3 The conclusion sentence	☐	c These sentences are in the middle of the paragraph. They give more information.

Find out

It's good to exercise regularly, but it's important to practice other activities for your mental health. Write a paragraph to show the importance of balancing between physical and mental exercises.

UNIT 1

LESSON 6 PROJECT

1 Read the text. What does mental activity do to your brain?

Summer camp!

To lead a healthy life, we need a mixture of physical and **mental** activities. Physical activity is good for your body. It makes our muscles strong and helps us use up the calories we get from food. Mental activities are good for our brain. When you draw, paint, write, or play an instrument, you really focus on the creative activity, so you relax.

Come to our three-day summer camp. Play sports and learn new skills. Make friends and have fun!

2 Read the task and make notes

You are organizing a summer camp for children aged nine and ten. What kind of activities can you do?

Think of a mixture of physical and mental activities. Why are they important?

Plan activities for the morning and afternoon.

Choose what you can have for lunch and for snacks.

REVIEW

UNIT 1

1 **Are these verbs regular or irregular?**

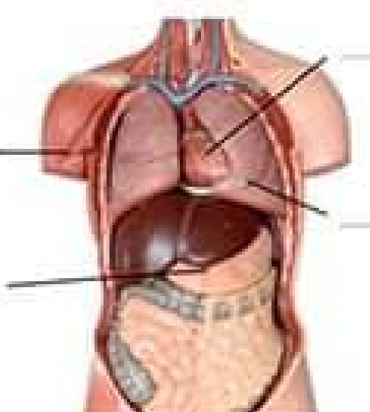
work play go eat have grow be

2 **Which words need a capital letter?**

a billion arabic exercise egyptian sara adam sight

3 **Look and label the body**

heart lung stomach muscle



4 **Ask and answer with a partner**

1 What system do we use when we breathe?
2 What does the left hemisphere of the brain control?
3 What are your five senses?
4 How often do the Paralympics happen?
5 Why is it important to be a Paralympic or an Olympic athlete?

SELF-ASSESSMENT

5 **Check the boxes that are true for you**

- I can understand important systems in my body. ☐
- I can form and use regular and irregular present simple verbs. ☐
- I can read about our senses. ☐
- I can practice when to use capital letters. ☐
- I can choose a title for a text. ☐
- I can plan activities for a summer camp. ☐

UNIT 2

Plants and animals

UNIT 2

In this unit I will ...

- understand the classification of animals.
- learn about the importance of size in the animal world.
- form comparative and superlative adjectives, and adverbs.
- read about invertebrates.
- use contrasting ideas.
- make a habitat report.

Look and discuss

1 What different animals can you see?
2 Where do these animals live?
3 What do they need to live?

Did you know?

A **species** of animal is a group of animals that are the same or very similar. There are millions of species of animals on Earth – and scientists discover new ones every year!

Find out

How many species of animals are there in Egypt?

UNIT 2

LESSON 1
VERTEBRATES

1 **Read and listen. How many types of animals lay eggs?**

Vertebrates

Vertebrates are animals with a backbone. There are five different types of vertebrates.

Mammals

Mammals have hair or fur on their bodies. They are **warm-blooded**. They feed their babies with milk and most of them give birth to their babies. They don't lay eggs. Humans are mammals. Most mammals live on land, but some live in the sea, such as whales and seals. **Bats** are the only mammals that can fly.

Reptiles

Reptiles are **cold-blooded**. This means that they have to spend time in the sun to keep warm. Most reptiles have four legs, except snakes who don't have any. They don't have hair or fur. They have **scales**. In addition, all reptiles lay eggs. Most reptiles live on land. Some can live in rivers or the sea, such as turtles, but they come onto land to lay their eggs.

Amphibians

Amphibians can live on land and on water, but they need water or a **moist** habitat to survive. Like reptiles, they are cold-blooded and they lay eggs. However, amphibians, like frogs and toads, always lay their eggs in water. They have smooth skin, not scales. They can take in oxygen through their skin and their lungs.

Fish

Fish live in water and take in oxygen through their **gills**; they can't breathe air. They are cold-blooded and they lay eggs. They also have scales and they use **fins** to move. There are thousands of different types of fish in all water habitats - saltwater, freshwater and wetlands.

Birds

Birds are warm-blooded, but they don't have fur or hair. All birds have feathers, and they all have wings. Birds lay eggs which are hard. Most birds can fly, but some can't.

They have **beaks**, which are made of bone. Their beaks are different shapes because they eat different food; some birds eat meat, some eat nuts and some eat **seeds**.

2 **Read again. Write the type of vertebrate**

1

____

2

____

3

____

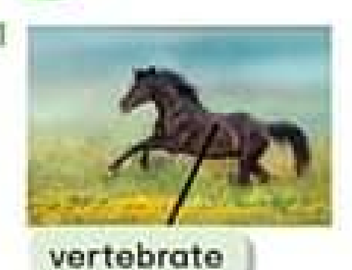
4

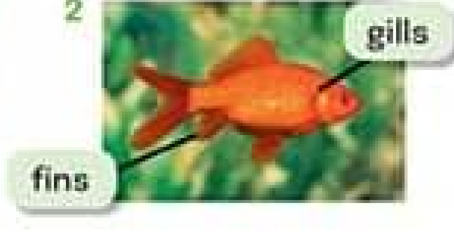
____

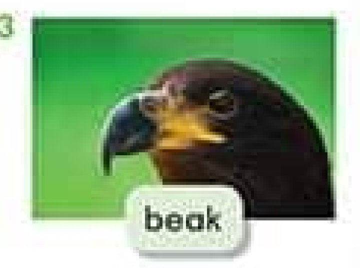
5

____

3 **Listen and say**

1 

2 

3 

4

5

4 **Play *True or False***

Find out

There are two kinds of mammals that lay eggs. Can you find out what they are called?

UNIT 2

LESSON 2 LANGUAGE

1 **Read about size in the animal world. Where does the biggest animal in the world live?**

Big and small

In the natural world, there are some enormous animals, and some tiny ones!

The biggest animal on land is a mammal: the African elephant. The African elephant is bigger than the Asian elephant.

The biggest animal in the world is also a mammal, but it lives in the sea. It's the blue whale, and it can be up to 30 meters long. In fact, they are the biggest animals that have ever lived on Earth!

The whale shark is the biggest fish in the world. It's smaller than the blue whale, at about 12 meters long.

The smallest bird is the bee hummingbird, which is about 5.5 centimeters long. It lives in Cuba. The biggest bird is the ostrich. It can be 2.5 meters tall! Ostriches are faster than leopards, but they can't fly.

In 2012, scientists discovered a tiny chameleon in Madagascar. People think it is the smallest reptile in the world, at just 30 millimeters long!

But even that is bigger than a frog in Papua New Guinea. It's 7 millimeters long, so it is the smallest vertebrate that we have discovered.

2 **Read again and answer**

1. Are African and Asian elephants the same size?
2. How big is a whale shark?
3. Can an ostrich fly?
4. When did scientists find a tiny chameleon?

Did you know?

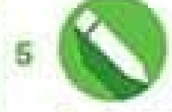
Ants are small, but they are extremely strong!
For their size, they are much stronger than humans.

3 **Read about big and small animals again. Underline the comparative adjectives. Circle the superlative adjectives**

4 **Read and complete the sentences**

smaller bigger

1 An Asian elephant is ______________ than an African elephant.
2 A blue whale is ______________ than a whale shark.
3 An ostrich is ______________ than a bee hummingbird.
4 A frog in Papua New Guinea is ______________ than a chameleon in Madagascar.

5  **Look and write**

1 An ostrich / be / fast / than / a leopard

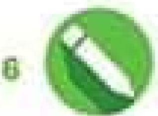
____

2 A bee hummingbird / be / small / than / an ostrich

____

3 Ants / be / strong / than / humans

____

6  **Read and write *T* (True) or *F* (False)**

1 The biggest animal in the world lives on land. ☐
2 The biggest animal in the sea is a fish. ☐
3 The smallest vertebrate is a bird. ☐
4 The biggest bird in the world can't fly. ☐

7 **Read and choose the correct word**

1 A frog in Papua New Guinea is the **biggest / smallest** vertebrate.
2 The **biggest / smallest** bird is the ostrich.

UNIT 2

LESSON 3
INVERTEBRATES

1 Read, think, and say

Vertebrates are animals with a backbone. What do you think an **invertebrate** is?

2 Read the text. What does Sami find out?

'Dad, I don't know what to write for my project!' said Sami sadly. 'I have to find out about some animals, but I don't know which animals to choose.'

'Why don't you write about **invertebrates**?' asked Sami's dad. 'More than 90% of all animals are invertebrates.'

'Good idea!' said Sami. 'Can I look on the internet quickly to find out information, please?'

'Of course,' said Dad.

'Oh wow!' said Sami. 'I've found a lot of information! Invertebrates are cold-blooded. They live on land and in water. Some invertebrates, such as **crabs**, have a hard shell for **protection**. Others, like **jellyfish**, have soft bodies. Some invertebrates can swim very well, such as the **octopus** and the **squid**.'

'Do you have enough information for your project? laughed Dad.

'Oh yes!' said Sami. 'Wait, I've found more! Some invertebrates, such as **snails**, have hard shells and move very slowly. Others are faster. **Dragonflies** can fly very fast.

Insects are also invertebrates. They have six legs. I think **grasshoppers** are the most amazing insects. They can jump more than a meter!' Did you know that the spider is not an insect? It has 8 legs and is called an **arachnid**. It can move very quickly.

'Well done!' said Dad. 'Have you finished your research? Can I have my cell phone back now, please?'

3 Read the facts and choose

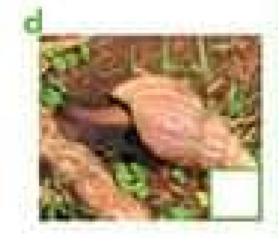
1 Invertebrates are **warm-blooded / cold-blooded**.

2 They **can / can't** all swim.

3 They live on land **and / but** not in water.

4 **All / Some** invertebrates have a hard shell.

4 **Listen and number**

a b c d 

5 **Find and underline these sentences in the text on page 26**

1 Some invertebrates can swim very **well**.
2 Some invertebrates, such as snails, move very **slowly**.
3 Dragonflies can fly very **fast**.
4 A spider has 8 legs. It can move very **quickly**.

6 **Complete the sentences using the adverbs in the box**

easily fast slowly well

1 Insects live in rainforests because they can find food ______________ .
2 The octopus can swim very ______________ .
3 Snails move very ______________ .
4 Some spiders can hide very ______________ .

7 **Read again and answer**

1 What invertebrates does Sami think are the most amazing? ______________
2 How did Sami find information? ______________
3 What other ways could Sami find out information? ______________
4 Name 3 facts you know about invertebrates from the text. ______________

Think!

Some invertebrates have a hard shell for protection. What can other animals do to protect themselves?

UNIT 2

LESSON 4
CLIL: ART

1 **Look and say. What colors can you see?**

2 **Read and say. Why do flowers have bright colors?**

Scientists think that there are nearly 400,000 different types of plants. Most of these have flowers, which come in many different colors. The bright flowers attract insects, which carry pollen from one flower to another flower. This helps the flowers to reproduce.

Primary colors are red, yellow and blue. We can't make these colors by mixing other colors. We make **secondary colors** by mixing the three primary colors in different amounts. We can make green, orange, purple, and all the shades in between. For example, we can mix red and yellow to make orange. The secondary colors can be made by mixing primary colors which are nearest to them on the color wheel. Adding black to a color makes it darker, and adding white makes it lighter.

3 **Look and find the primary colors on the color wheel**

4 **Read and answer**

1 What colors do you need to make purple? ____________________

2 What colors do you need to make orange? ____________________

3 How do you make green darker? ____________________

5 **Work with a partner. Read and discuss**

People sometimes describe colors as 'warm' or 'cold'. Which colors do you think are warm? Which ones do you think are cold? Why?

6 **Read and listen**

There are lots of interesting things to see under the sea! Some fish are very brightly colored, and so are some plants. In a coral reef, having bright colors can help fish to hide from **predators**. The coral is very bright and has different colors, so the fish can hide from bigger fish.

In addition, many predators don't eat **prey** that are brightly colored. Bright colors can be a warning that the animal is poisonous.

7 **Match the words and the definitions**

prey predator

1 the animal that hunts and eats other animals ____________

2 the animal that is caught and eaten ____________

8 **Draw an underwater scene. Include plants and animals**

9 **Talk about your picture. Can you describe what colors you used?**

UNIT 2

LESSON 5
WRITING: LINKING WORDS AND PHRASES

1 **Read about the water lily. How does the lily's stem help it adapt to its environment?**

Most plants grow in soil. However, some plants grow in water, such as the **water lily**. They have a large, flat leaf on the surface of the water, and a long stem that reaches down to the bottom of the lake.

They have brightly colored flowers and they make seeds which float on water. In addition, their roots spread under the water, and they can cover a very large area. On one hand, this can look pretty, but on the other hand, it can make it difficult for other animals and plants to live under the water.

2 **Read again and answer the questions**

1 What parts of a water lily are on top of the water?

____

2 What parts of a water lily are under the water?

____

3 **Read the tip and underline the phrases in the text**

Writing tip!

Use these words/phrases to link the sentences and ideas in your paragraph:

In addition: to add more information to the same idea

However: use this to show a change in topic

On one hand ... On the other hand: these can show two different points of view on the same topic

4 **Write on one animal that can live on land and on water. Research more on how it adapts to be able to live in both environments. Use some of the phrases in the *Writing tip!* box**

____

____

____

5 Think and say

1 Do you have a pet?

2 Where do pets usually live?

3 What animals are good pets?

6 **What do you think are the advantages and disadvantages of having a pet? Make notes in the table**

Advantages	Disadvantages

7 **Write a short text using some of the phrases in the *Writing Tip!* box**

UNIT 2

LESSON 6
PROJECT

1 Read the outline

In this unit you've learned about lots of plants and animals. When we study the natural world, we find animals and plants living together in a habitat. Vertebrates, invertebrates and plants all need each other and they work together to survive.

Large habitats, or **macro-habitats**, are forests, deserts, and grasslands. A **micro-habitat** is a small area such as a pond or a tree.

2 Work with a partner. Discuss. What micro-habitats are close to where you live?

3 Choose a micro-habitat. Write a report about the vertebrates, invertebrates and plants that live in your micro-habitat

Vertebrates: ____________________

____

Invertebrates: ____________________

____

Plants: ____________________

____

4 Draw and label a picture of your micro-habitat

REVIEW

UNIT 2

1 Write two examples of each of these types of animals

Mammals: ______________________

Reptiles: ______________________

Birds: ______________________

2 Choose 2 adverbs from the list and write 2 sentences using them

fast happily well slowly

____

____

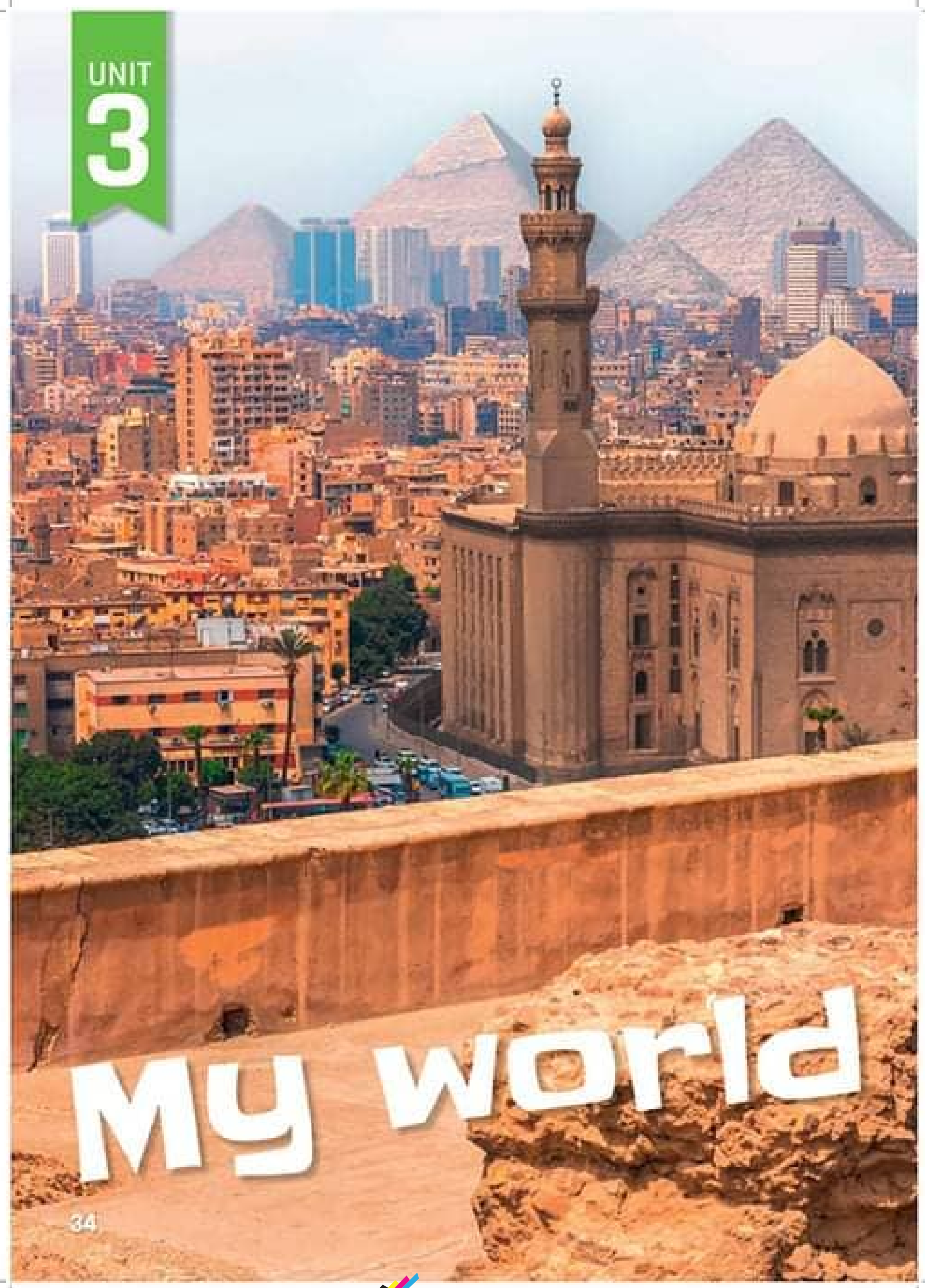
3 Ask and answer with a partner

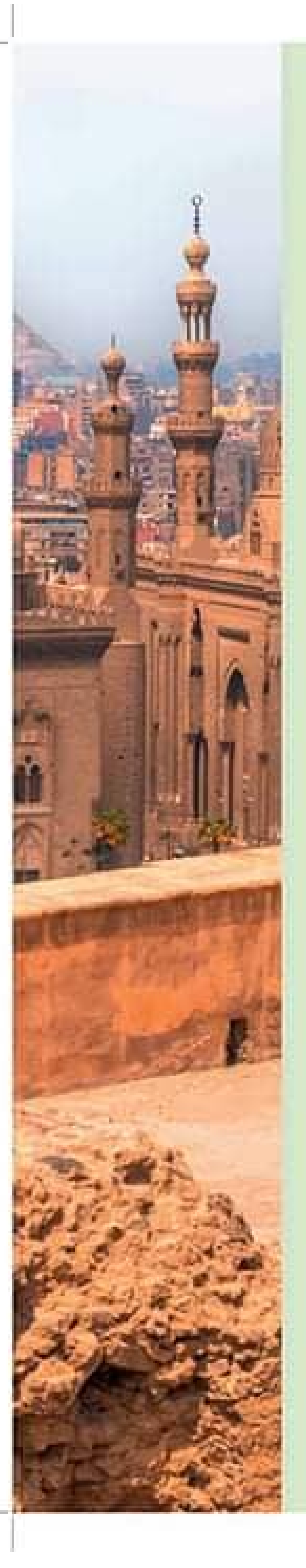
1 Which vertebrates have gills?
2 Which vertebrates lay eggs?
3 What is the biggest animal in the world?
4 Which invertebrate can fly very fast?
5 Why do fish have bright colors?

SELF-ASSESSMENT

4 Check the boxes that are true for you

- I can understand the classification of animals. ☐
- I can learn about the importance of size in the animal world. ☐
- I can form and use comparative and superlative adjectives. ☐
- I can learn about adverbs. ☐
- I can read about insects. ☐
- I can use contrasting ideas. ☐
- I can make a habitat report. ☐


UNIT
3
My world



UNIT 3

In this unit I will ...

- understand what makes a community.
- understand and use possessive forms.
- learn about the history of Egypt.
- form and use regular and irregular past simple verbs.
- read about the governorates of Lower and Upper Egypt.
- read about the development of farming.
- learn about Egyptian folk music.
- make a tourist information guide.

Look and discuss

1 What different types of buildings can you see?
2 What words can you use to describe this picture?

Did you know?

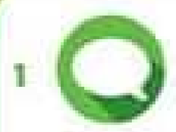
Egypt is one of the oldest civilizations on Earth. It became powerful over 5,000 years ago.

Find out

Who was the first pharaoh to bring Upper and Lower Egypt together?

UNIT 3

LESSON 1
MY COMMUNITY

1  **Read, think, and say**

What do you think a **community** is? Is it:

- who you live with?
- where you live?
- the things you can do?
- the things you think and believe?

2 **Listen and read**

My community

A **community** is a group of people who live and work together in the same area. A community is more than your house, family, or your **neighborhood**. It is a mixture of people, places, activities, and ideas. My community includes my family, my friends, and my school.

There are probably important places in your city or village that you often visit. You can also have a community there. For me, I am part of the community at my sports club too.

When you act in a way that is good for your community, this is good **citizenship**. This means that you work hard to help other people, and behave in a kind and fair way. Good citizenship is a good part of being in a community. I am always polite and helpful at school, and at my sports club.

3 **Read again and match**

1 community
2 neighborhood
3 citizenship

a behaving in a way that helps your society
b a group of people who live together in the same area and share activities and ideas
c the streets, houses, shops and schools close to where you live

4 Read again. Circle the things that you think are part of your community

food family weather sports

music school books clothes

games tourists

5 Listen and number

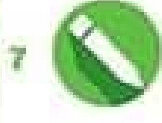
a

b

c

6 Read and circle

1 This is my neighborhood. It's **yours / mine**.
2 This is our school. It's **ours / theirs**.
3 This is my cousins' house. It's **theirs / mine**.
4 Those are Rasha's books. They're **hers / mine**.
5 That is your bike. It's **theirs / yours**.
6 These are Adam's shoes. They're **ours / his**.



7 Think and write. What is special about your community?

UNIT 3

LESSON 2
THE HISTORY OF EGYPT

1 **Read about the history of Egypt. What are the 3 main parts of the history of ancient Egypt?**

Egypt is a country with a very long and interesting history. People started to live near the Nile about 9,000 years ago, in 7000 BCE.

At first, there were two separate areas. Lower Egypt was in the north, where the Nile joins the sea. Upper Egypt was in the south, where the Nile flows through the deserts of Africa.

In about 3200 BCE, one **pharaoh**, Mena joined these two parts to **unite** the country of Egypt. Egypt controlled the Nile as far as boats could sail on it, so it became very powerful.

There are three main parts to the history of ancient Egypt:

the Old Kingdom [2800 - 2200 BCE]	the Middle Kingdom [2065 - 1775 BCE]	the New Kingdom [1570 - 1098 BCE]

Important **dynasties** controlled Egypt for many years. These were important families who ruled the country.

2 **Read again and answer**

1 When did people start to live near the Nile? ____________

2 Where was Lower Egypt? ____________

3 Why was Egypt powerful when it united? ____________

4 Who was the pharoah who united the two parts of Egypt? ____________

3 **Ask and answer. What did you learn?**

Where was Upper Egypt?

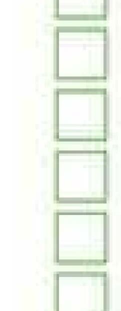
It was in the south.

Did you know?

The Pyramid of Djoser is the oldest pyramid in the world. People started building it in about 2648-2627 BCE.

4 **Find and write the past simple form of these verbs in the text on page 38. Then write *R* (regular) or *I* (irregular)**

1	start	started	R
2	join		
3	control		
4	become		
5	rule		
6	are		
7	is		



5 **Choose 3 past simple verbs from Exercise 4. Write sentences using these verbs**

____

____

____

6 **Read and complete the text with the verbs in brackets**

How do we know so much about the history of Egypt? Egyptians at that time 1 ____________ (use) **scribes** to write down everything that happened. Scribes 2 ____________ (be) very important people. They 3 ____________ (work) for the ruling dynasties.

They 4 ____________ (write) in **hieroglyphs**, which are pictures or symbols that can mean one word or many ideas. We can see these hieroglyphs today in tombs and museums. Children 5 ____________ (learn) to become a scribe at school. Scribes wrote on stone, or on paper 6 ____________ (make) from papyrus reeds.

Did you know?

There are over 700 hieroglyphic symbols.

UNIT 3

LESSON 3

THE GOVERNORATES OF EGYPT

1 **Look, read, and say**

The governorates of Egypt

There are 27 governorates in Egypt today. Look at the map. Where do you live?

2 **Listen and choose *a*, *b* or *c***

1 What is in a governorate?
 a cities and areas of countryside
 b large cities
 c large cities or cities and countryside

2 How many people live in Cairo Governorate?
 a 4 million b 10 million c 20 million

3 Which governorate is the biggest?
 a New Valley b Alexandria c Matrouh

4 How big is Damietta Governorate?
 a 440 square kilometers
 b 910 square kilometers
 c 1200 square kilometers

Find out

How big is your governorate? How many people live in it?

3 **Work with a partner. Look at the map on page 40. Ask and answer**

1 Which governorates are next to the sea?
2 Which governorates are next to another country?
3 What are 3 governorates in Lower Egypt?
4 What are 3 governorates in Upper Egypt?

4 **Listen, read and find these places on the map**

I'm Fares, and I live in the Red Sea Governorate. It has a beach which is over 1,000 km. It's a very popular place to visit for scuba diving and water sports.

I'm Nadia, and I live in Aswan Governorate. It's the farthest south in Upper Egypt. Its capital is Aswan. In 1970, engineers finished the Aswan High Dam.

I'm Ibrahim, and I live in the Alexandria Governorate. It's important because lots of ships sail in and out of the port. The city of Alexandria used to be the **capital city** of Egypt.

5 **Look at the map on page 40. Choose a governorate and find out:**

- how big it is
- how many people live there
- what the biggest city is
- what natural features it has

UNIT 3

LESSON 4
CLIL: MUSIC

1 Think and say. What kind of music do you like?

2 Read the text. What kinds of music does it talk about? Do you know any of this music?

Egypt has lots of traditional folk music. There are different styles from different parts of the country.

Folk musicians from Upper Egypt play Saidi music. This type of music uses **string instruments** such as violins, and **wind instruments** such as the **oboe**. Singing and drumming is also a key part.

Farther south is the home of Nubian music. **Clapping** and drumming is an important part of this type of music. Nubian music is now popular all over Egypt. Sometimes it is mixed with other modern styles of music.

The most popular instruments in Bedouin music are the **shabbaba** and the **rebaba**. Bedouin music also often includes singing. Songs are usually about special events.

3 Look, match and say

a ney b oud c rebaba d qanun e oboe

4 Listen. Can you name the instrument?

Did you know?

Music was important in ancient Egypt, too. We know this because scribes made pictures of musicians playing instruments, and ancient Egyptians put instruments into pyramids.

UNIT 3

LESSON 5 WRITING

1 **Read the text about folk dancing in Egypt. Have you seen any of these dances?**

Folk dancing has a long history in Egypt. It is linked to the folk music of different areas.

Nubian dancing is lively and colorful. People move their arms and feet to the rhythm of the music.

Raqs Assaya is probably the most famous dance from the Saidi musical tradition. The dancers use sticks (Assaya) and step quickly in special patterns. The ***Tahtib*** is also from the tradition of Saidi music. The dancers carefully perform a dance with sticks in a way that looks like fighting. Dancers wear special costumes. These can be dark and plain, or bright-colored and patterned.

In the cities alongside the Suez Canal, there are international types of music and dance. Musicians play the **simsimeya**, a Bedouin instrument, as well as drums.

UNIT 3

2 Read the tip and underline the topic sentence of the text in Exercise 1. Check how the topic sentence is developed

- [ ] using facts about the topic
- [ ] using definitions of important words
- [ ] using more details about the topic

3 Read the tip. Find and circle the adjectives in the text

Writing tip!

When you write a description, use a mixture of adjectives and adverbs to make your writing more interesting.

quickly famous colorful bright carefully

Adjectives	Adverbs

Writing tip!

The first sentence (or sentences) of a paragraph is usually called the **topic** or **introduction** sentence. It explains the main idea of the paragraph. The last sentence in a paragraph usually presents a summary of the topic in other words. Topic sentences in paragraphs should be developed with facts, definitions, and details.

4 Write about a type of music or dance you like. Use adjectives and adverbs to make your text interesting. Remember to develop your topic sentence by adding details, definitions or facts

UNIT 3

LESSON 6
PROJECT

1 **Read and match these sections of a tourist information guide to the type of information in that section**

1	Location	a	information about what happened here in the past
2	Geography	b	the environment and any natural features
3	Attractions	c	traditional art, entertainment, food, and music
4	History	d	where a place is in the country
5	Culture	e	what you can do and see in a place

2 **Which section of the tourist information guide would these sentences go in?**

1 There are high mountains next to a river. ____________
2 There's an art exhibition at the museum and a market every Tuesday. ____________
3 People play traditional music on string instruments. ____________
4 It's in the north of the country. ____________
5 People used to make paper from papyrus reeds. ____________

3 **Work in a group. Make a tourist guide to the place where you live, or a place you would like to visit. Choose a section from the guide each to research**

4 **Put your group's information together to make a brochure**

REVIEW

1 Write the past simple forms of these verbs

1 start ________ 2 become ________
3 grow ________ 4 use ________
5 play ________ 6 write ________

2 Circle the possessive forms

mine you it his yours me hers them theirs

3 Ask and answer with a partner

1 What can be part of your community?
2 Can you give an example of something that shows good citizenship?
3 What is a dynasty?
4 Why was a scribe important in ancient Egypt?
5 What is the biggest governorate?

SELF-ASSESSMENT

4 Check the boxes that are true for you

I can understand what makes a community. ☐
I can understand and use possessive forms. ☐
I can learn about the history of Egypt. ☐
I can form and use regular and irregular past simple verbs. ☐
I can read about the governorates of Lower and Upper Egypt. ☐
I can learn about Egyptian folk music. ☐
I can make a tourist guide. ☐

REVIEW 1

LESSON 1

1 Look, choose, and write

beak fur heart lungs scales skeleton

1 ____________

2 ____________

3 ____________

4 ____________

5 ____________

6 ____________

2 Read and sort

bat bird crab fish grasshopper jellyfish spider turtle

Vertebrates	Invertebrates

3 Read and answer *yes* or *no*

1 A vertebrate is an animal without a backbone. ____________
2 There are three main parts of the history of ancient Egypt. ____________
3 Lower Egypt is in the south. ____________
4 We use our digestive system when we breathe. ____________
5 Reptiles are cold-blooded. ____________
6 When we exercise, our heart beats more slowly. ____________

4 **Complete the sentences with the correct form of the appropriate verb**

1. We move lots of different muscles when we ____________ games such as tennis or football.
2. Our brain ____________ everything we do.
3. I ____________ tired after exercise.
4. We ____________ our ears for hearing.
5. The human body ____________ about five liters of blood.
6. Our body ____________ amazing things!

5 **Write sentences. Use the correct form of the verb and the adjective**

1. an ostrich / be / big / than / a bee hummingbird / .

____

2. an elephant / be / small / than / a blue whale / .

____

3. snails / be / slow / than / dragonflies / .

____

4. be / eagles / fast / than / mice / ?

____

6 **Read and circle. Then match and number**

1. A grasshopper can jump **far / loudly**.
2. An ostrich can run **fast / slowly**.
3. The giant squid is **big / bigger** than any other invertebrate.

a

b

c

LESSON 2

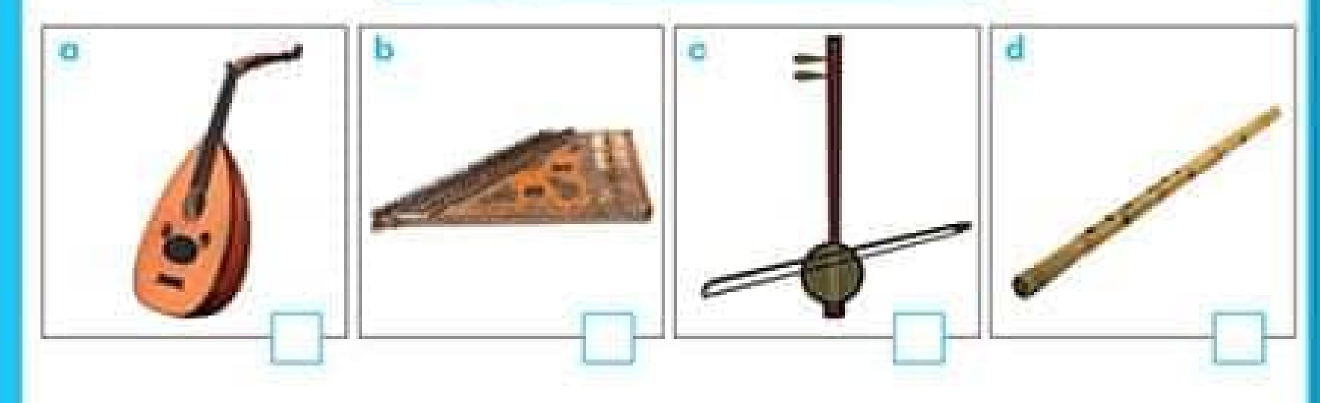
1 **Read and complete. Choose *a*, *b* or *c***

The River Nile 1 ___was___ very important when Egypt developed as a country. It 2 ______ twice a year and this 3 ______ the land fertile. There 4 ______ three seasons of farming in Egypt – flooding season, growing season and harvest. The rulers of Ancient Egypt 5 ______ the River Nile along all the area where boats 6 ______ sail on it, so Egypt 7 ______ a very powerful country.

	a	b	c
1	a be	b was	c were
2	a flooded	b flooding	c floods
3	a making	b make	c made
4	a was	b is	c were
5	a controlled	b control	c controls
6	a can	b could	c can't
7	a become	b became	c becomes

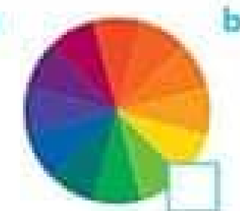
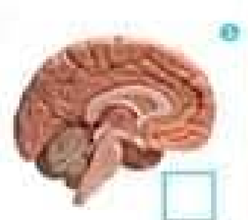
2 **Listen and number the photos. Then match and write**

ney oud qanun rebaba



______ ______ ______ ______

3 Look, read and number

a 
b
c
d 
e

a We don't understand everything the brain does, but it controls our 1 ___senses___, memories and how we speak.

b The biggest group of animals on land is the 2 ________ group. These animals don't have a backbone, but some have hard 3 ________ for protection.

c Traditional folk musicians in Egypt play lots of different 4 ________. Saidi music comes from Upper Egypt. It uses wind and 5 ________ instruments. Clapping and 6 ________ is an important part of Nubian music.

d Braille is a 7 ________ which uses combinations of dots to represent letters, number, punctuation marks or whole words. People who are blind or have difficulty seeing can use this to read. They use 8 ________ instead of sight.

e There are three 9 ________ colors: red, yellow and blue. We make secondary colors by mixing these three colors together. Colors such as red, orange and yellow are 10 ________. Colors such as blue and green are cold.

4 Read again and complete

code drumming instruments invertebrate primary senses shells string touch warm

5 Read again and answer

1 What controls our memories?
2 What is the same about all invertebrates?
3 What is special about Nubian dancing?
4 What do people touch when they read Braille?
5 How many primary colors are there?

PRESENTATION

1 **Find and complete**

1 Research about an Egyptian Paralympic athlete. Complete the fact file.

Name	
Sport	
Competitions	
Medals	
How do they live a healthy life?	
How do they train?	

2 Find a photo or draw a picture of the athlete.

2 **Prepare and practice**

1 Practice talking about your athlete.

2 Remember this advice:

- Look at the people you are talking to.
- Speak clearly.
- Show the picture carefully.

3 **Work in groups. Present your athlete to your group. Listen and make notes about the presentations**

	Name:	**Name:**	**Name:**
Do they look at the people they are talking to?			
Do they speak clearly?			
Do they show the picture carefully?			

SELF-ASSESSMENT

Now I can ...

1 talk about parts of the body.

2 talk about animals and compare them.

3 talk about the history of Egypt, folk music and folk dancing.

4 use capital letters correctly:
Arabic, Connect Plus, Egypt
write a summary for a text.
develop the topic sentence.

NON-FICTION READER: CORAL REEFS

1 **Read and listen. What is a coral reef? Choose the best answer.**

a a brightly colored plant
b a large area of plants and animals
c invertebrates that grow slowly and don't move

What are coral reefs? They look like they are made of plants, but this is wrong. Coral reefs are made of thousands of tiny invertebrates, called **polyps**. They have a hard **exoskeleton**, and they don't move – they stay in the same place all the time.

Different species of polyps grow into different shapes and sizes, but they all grow very slowly. They can sometimes grow for more than ten thousand years.

We think coral reefs have very bright colors. However, most coral polyps don't have a color. They have **clear** bodies and their exoskeletons are white. The color comes from tiny **algae** that live inside the polyps. It is their bright colors that we can see. In a small part of a coral reef, there are millions of these tiny **organisms**.

Coral polyps can live in all the oceans around the world, in very cold water and in warm seas. They only grow together and make coral reefs in warm water. The water must be **shallow** too, because the reefs need sunlight to live and to grow.

Coral reefs are homes for many other animals, so they are a very important habitat. Tropical fish often have bright colors so they can hide safely in a reef. It is a type of camouflage. The unusual shapes of coral reefs also give lots of places to hide.

The Red Sea coral reef is the largest coral reef system in Africa and the third largest reef system in the world. It is about 4,000 kilometers long, and covers over 2,000 square kilometers.

2 Read again and answer

1. Why do coral reefs have bright colors?
2. Why do coral reefs need sunlight?
3. Why do tropical fish live in coral reefs?

3 Read and match

1. exoskeleton
2. algae
3. organism
4. clear
5. polyp
6. shallow

a. not deep; in the sea or a river, the water doesn't go down very far
b. no color; you can see through it
c. a skeleton that is on the outside of an invertebrate's body
d. very simple organisms that live in water
e. a living animal or plant
f. a very small and simple creature that lives in the sea

Tip!

Algae is a plural word.

Algae live inside coral polyps.

4 Look, read and circle *a* or *b*

1. a Coral polyps have a clear exoskeleton.
   b Coral polyps have a skeleton which can be different colors.
2. a All species of polyps look the same in a coral reef.
   b Different species of polyps are a variety of shapes and sizes.
3. a Coral reefs can grow in deep or shallow water.
   b Coral reefs grow in shallow water because they need sunlight.

5 Read. What is coral bleaching?

At the moment, the seas and oceans on Earth are getting warmer. This is because of **global warming**.

When the water temperature rises, the algae inside the coral polyps leave. The algae give the coral reef its bright colors. So, when the algae leave, the reef is pale and white. This is called **coral bleaching**.

Coral bleaching can also happen when there is pollution, too much sunlight, or not enough water. When a reef loses its color, the coral dies, and the animals who live in the reef cannot stay there.

In 2020, scientists discovered that some coral reefs in the Red Sea can survive changes in temperature. They are the only types of coral in the world that can do this. The water of the Red Sea is warmer than other seas, so the coral in the Red Sea does not have the same problem with coral bleaching. Scientists hope that they can use the Red Sea coral to protect other coral reefs around the world.

To protect coral reefs we also need to have less pollution in our oceans. We must also work together to reduce global warming. It's important to protect the Red Sea coral reef and other coral reefs around the world.

6 Read and answer

1. What causes coral bleaching?
2. Why is coral bleaching a problem?
3. Why are the Red Sea coral reefs different?

Think!

Why do you think coral reefs are important for humans as well as animals?

SKILLS

7 **Imagine you are part of an environmental group. You want to tell people why we need to protect coral reefs.**
Make notes

Tip!
You can find out about a reef in your country or another part of the world

What are coral reefs? ______________________

Why are they important? ______________________

What problems do coral reefs have? ______________________

Who is affected by these problems? ______________________

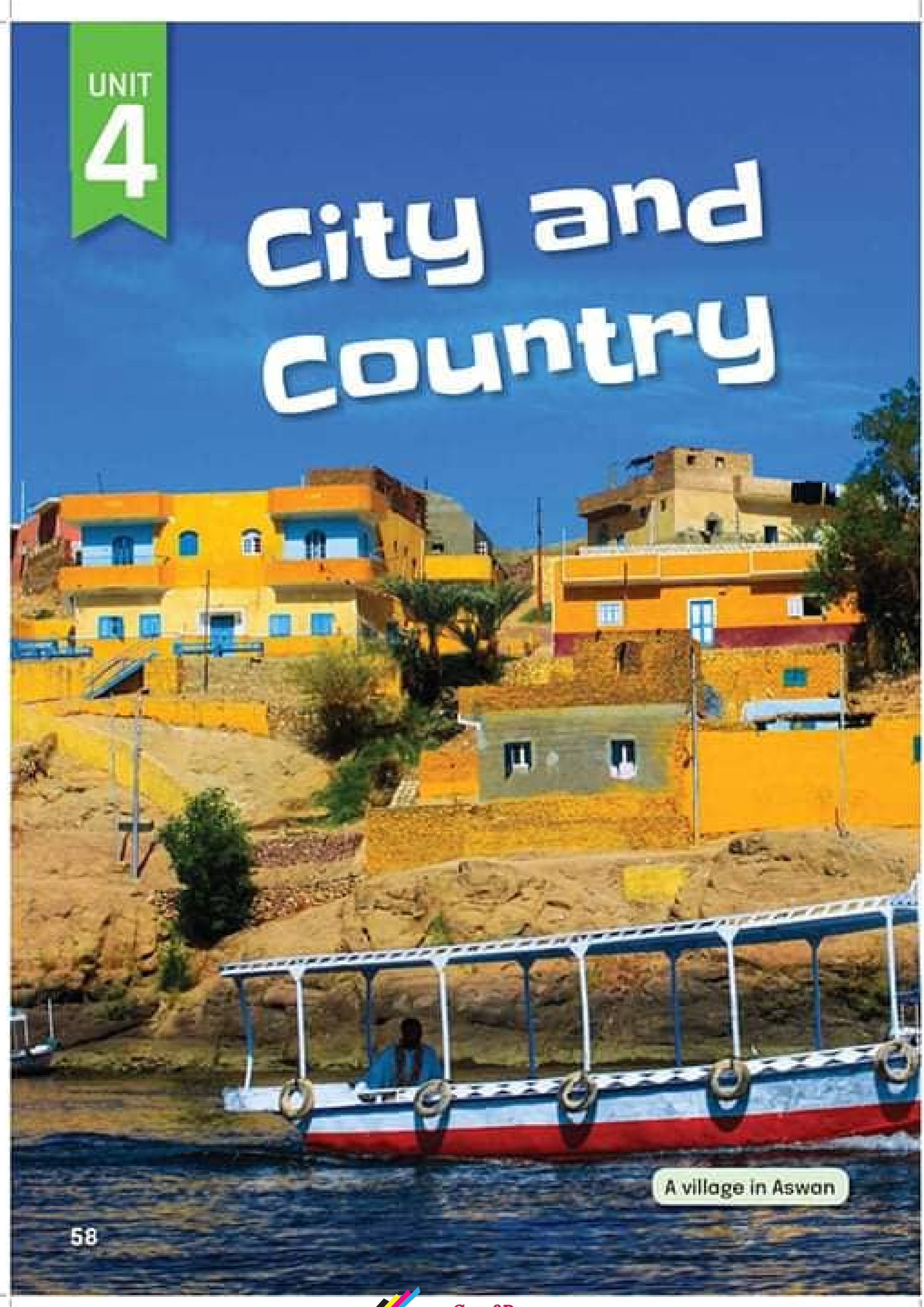
What can scientists do? ______________________

What can we do? ______________________

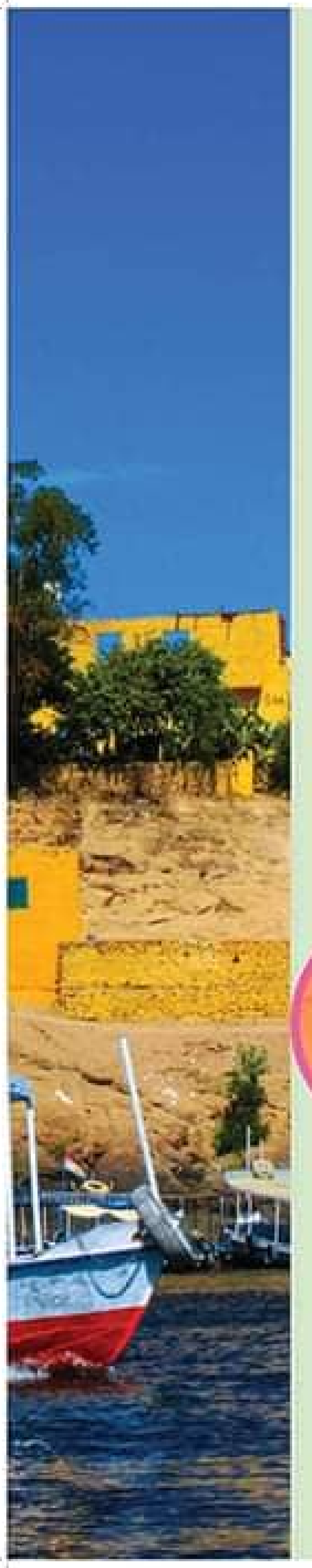
Think about these words. Can you use any of them?

ecosystem   algae   pollution   coral bleaching
marine   shallow   global warming   colorful

8 **Write a poster about why we need to protect coral reefs**



A village in Aswan



UNIT 4

In this unit I will ...

- compare life in the city and in the country.
- form and use regular and irregular plural nouns.
- read about crafts and heritage industries.
- use subordinating conjunctions in sentences.
- multiply and divide numbers.
- add and subtract fractions.
- plan smart growth for a city.

Look and discuss

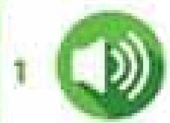
1 Where in Egypt is this village?
2 Describe the village. How many people do you think live there? What are the houses like? Can you see any plants or animals?

Did you know?

The oldest city in Egypt is probably Fayoum. Archeologists say that people started living there more than 6,000 years ago.

Find out

How many people live in your area?



UNIT 4

LESSON 1
RURAL AND URBAN PLACES

1 Listen and read

Hello, my name's Fareeda and I want to tell you about where I live. I live in Greater Cairo. It's a **metropolitan** area and **densely populated**. There are more than 20 million **inhabitants**, so it's a very busy place. There are a lot of cars so there's also **congestion**. If you are a **pedestrian**, you have to be very careful.

Fareeda

Hi there. I'm Zein. I'm going to tell you about my **village**. It's **sparsely populated** – only about 700 people live here. It's also a very **traditional** place. It's in the desert so it's an **isolated** place, too. We have a lot of **services** close to my family's home though, like **shops**, **workshops**, and my **school**.

Zein

2 Listen again. Write *Fareeda* or *Zein*

1

____

2

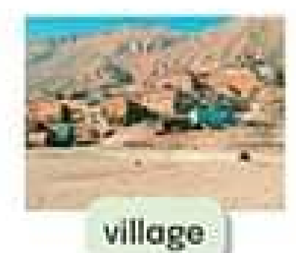
____

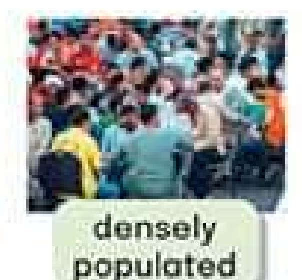
3 **Circle the correct word to complete the sentences.**

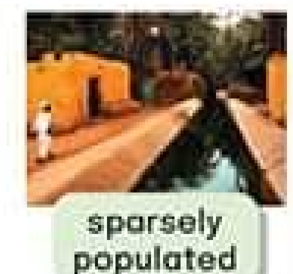
1 Fareeda lives in **a rural / an urban** environment. There **are / aren't** a lot of inhabitants. The population is **sparse / dense**.

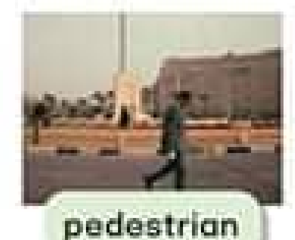
2 Zein lives in **a rural / an urban** environment. There **are / aren't** a lot of inhabitants. The population is **sparse / dense**.

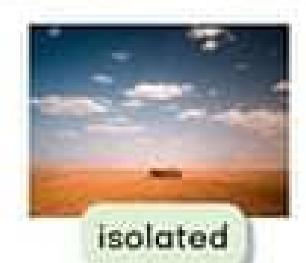
4











5

1 Where do you live?
2 Is it sparsely or densely populated?
3 What services are there?

UNIT 4

LESSON 2 LANGUAGE

1 **Read about Waleed's life**

My name's Waleed and I live in a small village on the Nile. My dad's a farmer. He grows tomatoes, potatoes, dates, and onions. We have some animals too. There are six sheep and two buffaloes. There are some donkeys in my village, but my family doesn't have one now. You can see cats in the street and if you're lucky, you might see some beautiful Egyptian geese on the river.

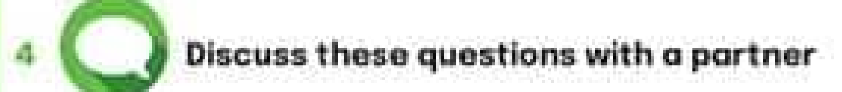
Waleed

My family lives in a traditional home. There are seven people living in it. There are two men in my family - my dad and my grandpa - and two women - my mom and my grandma. And of course, there are some children too! I have two sisters, but there aren't any babies because we're all grown up. Do you have any brothers or sisters?

2 **Read about Waleed's life again. Find and write the plural nouns**

1	donkey	donkeys	☐	2	date	______	☐
3	woman	______	☐	4	person	______	☐
5	potato	______	☐	6	sister	______	☐
7	buffalo	______	☐	8	baby	______	☐
9	goose	______	☐	10	man	______	☐
11	brother	______	☐	12	child	______	☐
13	tomato	______	☐	14	sheep	______	☐

3 **Check (✓) the irregular plural nouns**

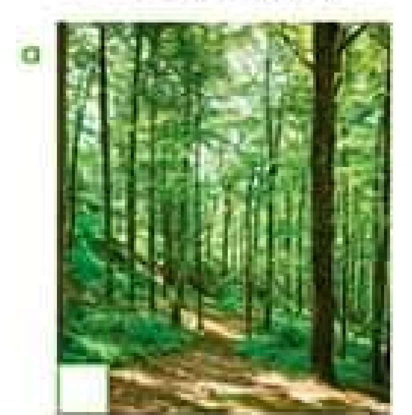


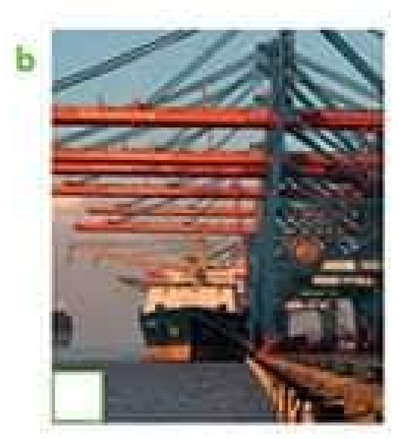
4 **Discuss these questions with a partner**

What's the difference between a village and a city?

What do they have in common?

5 **Listen to the interview. Number the pictures as Dr. Hossam talks about them.**

a


b


c

6 **Listen to the interview again. Complete the sentences.**

1 People get ____________ from the water. They also use water for ____________.

2 Cities develop in mountains because they can ____________ people. There are ____________ in the mountains, too.

3 ____________, coal, aluminum, or copper are all important natural resources near some cities.

7 **Research and answer the questions. Share your answers in small groups.**

What are the 5 largest cities in Egypt? What is the population in these cities?

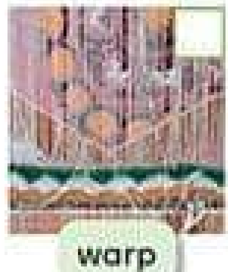
Did you know?

More than half of the world's population lives in cities.

UNIT 4

LESSON 3
LANGUAGE

1 **Do you know how artisans make carpets? Look at the pictures and tell a partner what you think**


warp

dyed yarn

spin

dye

carpet

2 **Read the text and number the pictures**

Visiting a Carpet Workshop

Last summer I really wanted to learn about traditional Egyptian crafts. So, my grandma took me to a spinning and weaving workshop **so that** I could learn about this craft. The guide explained how the artisans make the carpets **while** we watched them weave.

First, they collect the wool from sheep. They have to clean, wash, and dry the wool **before** they can use it. The **artisans** spin the wool to make it into yarn after they clean it. Then, they need to dye the yarn - that is how it gets its color. I think the bright colors are the most beautiful ones **even though** some people prefer dark colors. These artisans only use natural vegetable dyes, **although** some other workshops use synthetic dyes. My grandma and I like the natural vegetable dyes as they are more traditional.

So, now I guess you're wondering how they dye the wool. Well, I learned that different plants and roots are first grown in a rural village. Then they use these plants and roots to make beautiful dyes to color the wool. They have to boil the yarn with the dyes, and then let it dry. **As soon as** the yarn is dry, they can use it to weave a carpet.

Before the artisans can weave the carpets, they have to make the warp. The warp is the structure of the carpet. They make the warp using spun Egyptian cotton. Later, they use the warp and the dyed wool to make beautiful carpets. The artisans make the carpets by hand using a machine called a loom. They add the different colored yarn to make geometric patterns.

My grandma let me pick out a carpet for my bedroom. **Every time** I look at it, I remember how much work and skill it takes to make just one carpet.

3 **Design a carpet. Draw a pattern and use at least 3 different colors to decorate it. Then share your design with your group and explain how it is made**

4 **Use the subordinating conjunctions in the box to complete the sentences. Check your answers in the text on page 64**

after	although	As soon as	before
even though	Every time	so that	while

1. My grandma took me to a spinning and weaving workshop ___so that___ I could learn about this craft.
2. The guide explained how the artisans make the carpet __________ we watched them weave.
3. They have to clean, wash, and dry the wool __________ they can use it.
4. The artisans spin the wool to make it into yarn __________ they clean it.
5. I think the bright colors are the most beautiful ones __________ some people prefer dark colors.
6. These artisans only use natural vegetable dyes, __________ some other workshops use synthetic dyes.
7. __________ the yarn is dry, they can use it to weave a carpet.
8. __________ I look at it, I remember how much work and skill it takes to make a carpet.

5 **Which two of these subordinating conjunctions have the same meaning?**

__________ and __________

6 **Complete the sentences so that they're true for you**

1. I do my homework **so that** __________
2. __________ **while** the teacher is talking.
3. I say thank you **after** __________
4. __________ **as soon as** I get home from school.

7 **Compare your sentences with your partner's sentences. Are any of them the same?**

UNIT 4

LESSON 4
CLIL: MATH

1 **Answer these multiplication problems**

1 There are 15 farmers in Lama's village. Each farmer has 35 sheep. How many sheep are in Lama's village? ______________

2 There are 21 weavers working in a weaving workshop. Each weaver can make 24 carpets each year. How many carpets does the workshop produce each year? ______________

3 Hany's family has 36 geese. Each goose has 8 babies, called **goslings**. How many goslings are there? ______________

2 Answer these division problems

1. There are 48 children in Sherif's class. His teacher wants the children to work on a project in groups of 6. How many groups do the children have to make? ____________
2. Amira's hens laid 240 eggs. She wants to sell the eggs at the market. If they can put 6 eggs in each box, how many boxes do they need?

   ____
3. Amir grew 693 kilos of potatoes. He can put 3 kilos of potatoes in each sack. How many sacks does he need?

   ____
4. The potters made 6,342 pots last year. They sold the pots at 6 different markets. How many pots did they sell at each market?

   ____

3 Answer this problem with fractions

The children are going to spend $\frac{1}{4}$ of the class reading in English, $\frac{1}{4}$ of the class speaking in English, and $\frac{1}{2}$ of the class watching a movie. How much of the class will they spend on reading and speaking in English? ____________

Extra challenge!

Nagwa has a large loaf of bread. If she gives $\frac{1}{4}$ of the loaf to her grandparents, and $\frac{1}{2}$ to her parents, how much of the bread does she have left?

____

UNIT 4

LESSON 5 WRITING

1 **Read the text that Dina wrote about her city. Match the headings to the paragraphs**

a What I Like

b My City

c My Neighborhood

Alexandria

I'm Dina and I'm going to tell you about myself today.

1 ______________________

I live in Alexandria. It's a beautiful city on the Mediterranean Sea. As you might know, it's the second largest city in Egypt with a population of more than 5 million people. It has an important port and there is a lot of industry here too.

2 ______________________

I live with my family in an apartment in a neighborhood called Amrya. There are 6 people in my family: my parents, my grandparents, my brother Magdy and me. Our apartment isn't big, but it isn't small either.

3 ______________________

I like my city because we have a lot of services. We have schools, hospitals, and lots of shops where you can buy anything you need. We can also use the bus to go wherever we want. One of my favorite places is Montaza Palace. There are beautiful gardens that I sometimes visit with my family.
I love my city very much and I hope you visit Alexandria one day.

2 **Read the tip and underline the introduction and the conclusion in the text in Exercise 1.**

3 **Write a text about your city. Use Dina's text as a model. Remember to add an introduction and a conclusion to your text.**
Don't forget to write about:

Tip!

In longer texts, there is an introduction which presents the general idea of the text. The conclusion part comes at the end to present a summary of the text's main idea and tells the reader what to do with the information you presented in your text.

- Your city: location, population and famous places
- Your neighborhood: where you live and who you live with
- What you like about your areas: your favorite places and services

____

____

____

____

____

____

____

____

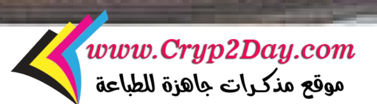
____

____

____

Writing tip!

When you use clear paragraphs, it's easier for people to understand your writing. Use several short paragraphs instead of one or two long ones. You can give each paragraph a heading like Dina did, too.



UNIT 4

LESSON 6
PROJECT

1 **Use the words in the box to complete the text**

green cars environment doctors plan walk

What is Smart Growth?

Smart growth is a way to 1 __________ new areas of a city.
Smart growth planners want to protect the 2 __________ and improve the lives of people living in them. Here are some of the ideas behind smart growth:

- People can 3 __________ to work or school.
- There's good public transportation and no 4 __________ .
- People have all of the services that they need close to their homes: shops, markets, 5 __________ , government offices, etc.
- There are 6 __________ spaces for people to enjoy.

2 **Now listen and check your answers**

3 **Work in a group. Design a new area of smart growth for a city. Draw a plan and write a description of your smart growth. Make sure to plan:**

- Housing
- Places of work and school
- Public transportation
- Green spaces

REVIEW

UNIT 4

1 **What are the plural forms of these words?**

person buffalo woman baby child goose tomato

______ ______ ______ ______ ______ ______ ______

2 **Write two sentences. Use one of the subordinating conjunctions in each sentence**

so that every time while after before although as soon as even though

______

______

3 **Work with a partner. Discuss the questions. Use the word lists to help you**

1 How is a carpet made?

weave wool spin yarn dye cotton warp loom

2 There are 5 bakers in the city. Each baker makes 110 loaves of bread every day. How many loaves of bread are there each day in total?

3 Why do cities develop where they do?

4 What is smart growth?

SELF-ASSESSMENT

4 **Check (✓) the boxes that are true for you**

I can compare life in the city and the country. ☐

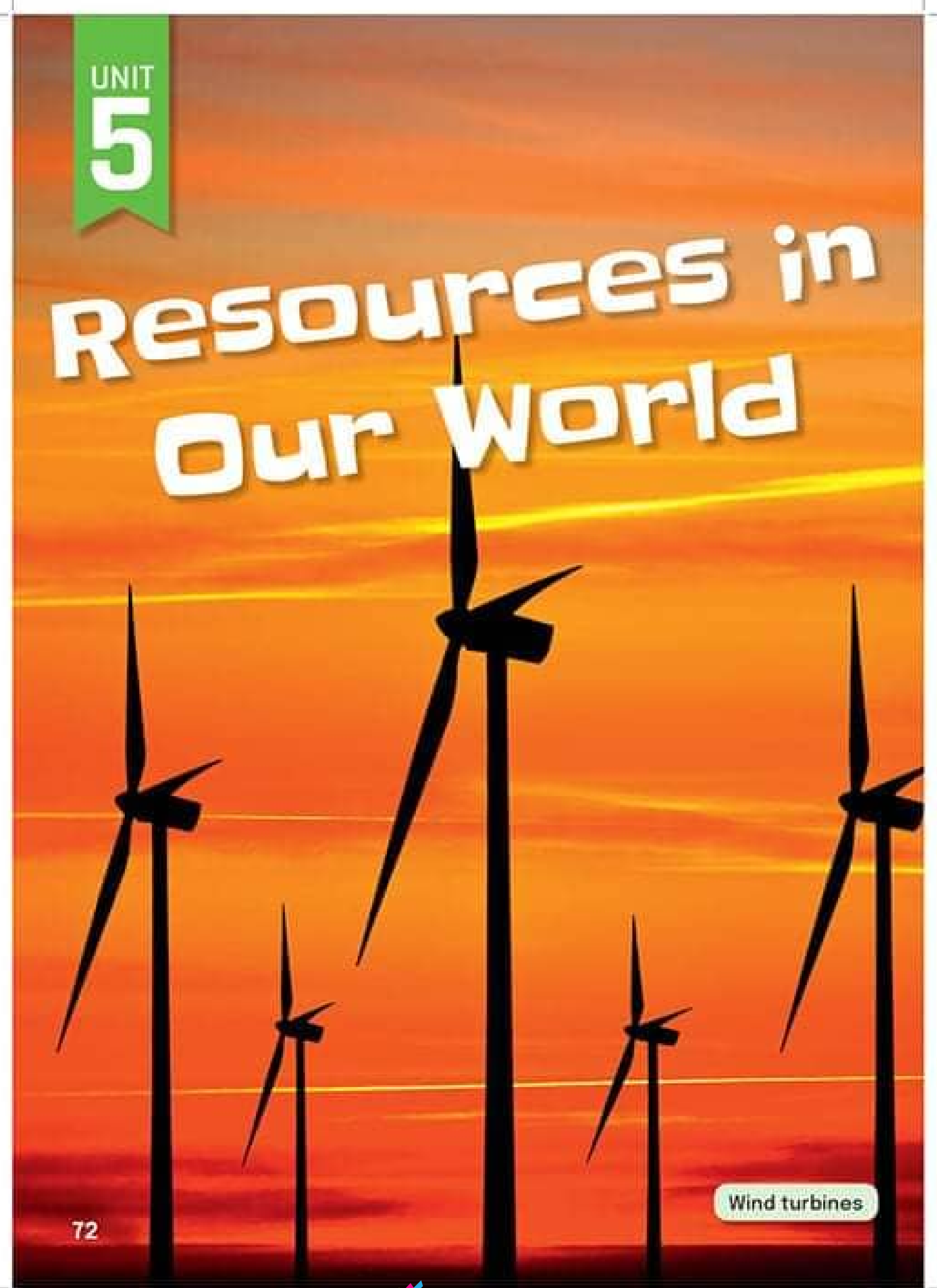
I can form and use regular and irregular plural nouns. ☐

I can explain crafts and heritage industries. ☐

I can use subordinating conjunctions in sentences. ☐

I can multiply and divide numbers. ☐

I can plan smart growth for a city. ☐



Resources in Our World

Wind turbines

UNIT 5

In this unit I will ...

- understand the difference between renewable and non-renewable resources.
- identify fossil fuels and the problems with them.
- use the correct form of third person present singular verbs.
- explain different types of renewable energy sources.
- match and correctly use pronouns.
- recognize and use vocabulary related to jobs.
- understand how to be a good team member.
- write an email to apply for a job.
- design a vehicle that runs on a renewable energy source.

Look and discuss

1. What are these wind turbines used for?
2. Where can you see wind turbines?
3. Have you ever seen one?

Did you know?

The first windmills were used in western Asia almost 3,000 years ago to **grind** grain and pump water.

Find out

How is wind energy used in Egypt?
Are there any plans to use more wind energy in the future?

UNIT 5

LESSON 1
NATURAL RESOURCES

1 **Read and listen. What are renewable resources?**

Our Natural Resources

Natural resources are materials that we get from nature. People use these materials for different purposes. If you look around your classroom, you will probably see different types of them. What is your school made of? We use stone to construct buildings, bridges, and sometimes schools too. What are you sitting on right now? Is it made of wood? Forests, and the wood we get from them, are another important natural resource. Is anything made of plastic in your classroom? Plastic is made from petroleum, which is ... that's right - a natural resource!

Can you find any minerals in your classroom? What about the door handle, the window frame, or the watch your teacher is wearing? Is part of your desk or chair metal? There are many different types of metal, which are types of minerals. Gold and silver are two common ones. And they are all natural resources.

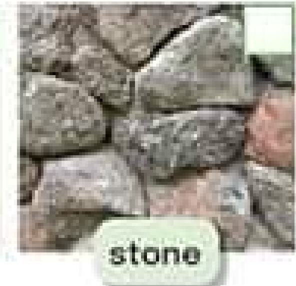
The water you drink at lunch is a natural resource. Where do the potatoes we eat come from? They're grown in the ground, and this ground is made up of what we call soil. So yes, soil too, is a natural resource.

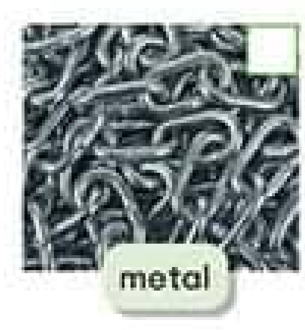
Some resources are what we call **renewable**. Renewable resources can be naturally replaced when they run out. The sun, wind and falling water are examples of renewable resources.

Then there are **non-renewable** resources. These are things like metals and petroleum. Once we have used all of them up, we can't get any more here on Earth.

2 **Listen and read again. Answer the questions with a partner**

1 What are natural resources?
2 What's the difference between renewable and non-renewable resources?
3 What renewable and non-renewable resources can you find in your home?





4 **Are these renewable or non-renewable resources? Write *R* (renewable) or *N* (non-renewable)**

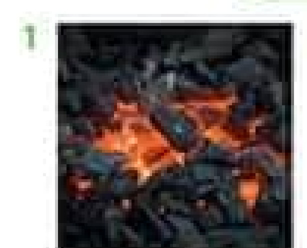
5 **Play *Guess the Resource* with a partner. Use the pictures in Exercise 3**

UNIT 5

LESSON 2 LANGUAGE

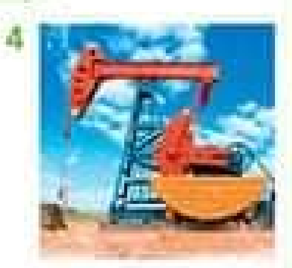
1 **Match the words to the pictures. You can use a dictionary to help you**

a fossil   coal   natural gas   a crude oil well

1 
______

2
______

3
______

4 
______

2 **Listen and repeat**

1 fossil fuels
2 coal
3 crude oil
4 an oil well
5 natural gas
6 greenhouse gases
7 global warming
8 climate change

Tip!

A **fuel** is a material that we burn to produce power or heat.

3 **Listen to a geologist named Professor Kamal talking about fossil fuels. Complete the sentences**

1 Fossil fuels are a ______ resource.
2 Crude oil is turned into ______.
3 Fossil fuels were plants and animals that lived ______ the dinosaurs.
4 There is a ______ problem with fossil fuels: global warming and climate change.

SPEAKING

4 **Discuss the questions in a group**

1 What fossil fuels do your family use?
2 How can people use fewer fossil fuels?

Did you know?

Today, around 80% of the energy used around the world comes from fossil fuels.

5 **Write the verbs in the correct box in the table**

does flies goes knows relaxes studies uses watches

When the subject of a present tense sentence is *He*, *She*, or *It*, you need to change the verb:

+s	+es	+ies	+es
most verbs	verbs that end in -s, -z, -ch, -sh, -x	verbs that end in a consonant and -y	verb that end in -o

6 **Use the verbs in bold to complete the sentences. Look at the table in Exercise 5 to help you**

1 The baby ____________ when she's hungry. (**cry**)
2 Youssef's dad is a mechanic. He ____________ cars. (**fix**)
3 Talia sometimes ____________ TV after school. (**watch**)
4 My family ____________ to visit my grandparents on Fridays. (**go**)
5 Magdy ____________ his hand when he ____________ his exercises. (**raise / finish**)
6 Our cat ____________ a lot of water when it's hot out. (**drink**)

7 **Listen and check your answers. Then listen and repeat**

8 **Complete the text about Gameela's day with the verbs in the box. Use the correct form of the verbs**

brush catch do dry eat finish go help kiss ~~wake~~ wash wash watch

Gameela 1 wakes up for school at 7 o'clock. First, she 2 ____________ her face. Then she 3 ____________ her breakfast and 4 ____________ her teeth. She 5 ____________ to school at 7:30.

School 6 ____________ at 2 o'clock. She 7 ____________ the bus to go home. Then she 8 ____________ her homework. Sometimes she 9 ____________ her mom make dinner. Her brother Younis 10 ____________ and 11 ____________ the dishes with his father.

Her family 12 ____________ a movie after dinner. Before going to bed, she 13 ____________ her mom and dad goodnight.

LESSON 3
RENEWABLE ENERGY

1 **Look at the pictures. How do you think renewable energy is created in each one? Discuss your ideas with a partner**

wave power

wind power

solar power

tidal power

2 **Read and discuss. Why is the desert a good place for a solar farm?**

Solar Panels in the Desert

Seleem walks to school every day. The road is next to the desert. It is usually hot, sunny and **dusty** on the road.

Last year, there was nothing in the desert. Sometimes Seleem saw a lizard, but most of the time, he just saw rocks and sunshine.

Now things are different. He sees lots of workers and trucks in the desert. They are building a solar farm.

At school, Seleem's teacher asks the class a question. 'What is **renewable energy**?'

Seleem puts his hand up. 'Renewable energy is from a resource that won't **run out**,' he said.

'Very good,' said Mr Ali. 'We need to make electricity. We can burn fossil fuels like oil and gas, but they will run out. We can also make electricity from renewable resources like the wind and water. Tomorrow we will go on a short school trip to learn more about renewable energy here in Aswan.'

The next day, Seleem and his class are very excited. Mr Ali takes them to the new solar farm. They meet the workers.

Some of the workers are putting **solar panels** in the desert. Some workers are driving trucks. Some workers are engineers.

One of the engineers tells the class, 'We will have more electricity in the city soon, and in your school too! We have so much sunshine in the desert, so it is the perfect place for a solar farm. The solar panels collect energy from the sun and we can make that into electricity for our homes.'

3 Read again and choose *(T)* true or *(F)* false

1 Seleem lives in Alexandria. T/F
2 The weather is usually hot and sunny in the desert. T/F
3 The solar farm was built last year. T/F
4 The class goes on a trip to the solar farm. T/F
5 Some of the workers are putting solar panels in the desert. T/F
6 Trucks at the solar farm collect energy from the sun. T/F

4 Read the sentences about solar energy. Check (✓) if they are advantages or disadvantages

	Advantage	Disadvantage
1 Solar panels are expensive.		
2 We can't make solar power on a rainy day.		
3 Solar farms need a very big space.		
4 Solar panels are easy to look after.		
5 Electricity from solar power is cheap.		

5 Read the text. Use the words in bold to label the photos

We can't destroy energy. We can only change it from one kind of energy to another kind. This is called *transfer of energy*.
When we use solar panels to collect sunlight, the **solar energy** is turned into **electrical energy**. When you use this electrical energy for a television, it is now **mechanical energy**.

1 ________ 2 ________ 3 ________

Find out

Are there any renewable energy projects in your area? How do they make electricity?

UNIT 5

LESSON 4
LANGUAGE

1 **Read these sentences. The nouns are in green and their pronouns are in purple. Circle the pronouns, and draw an arrow from them to their nouns.**

Lara did her science project on global warming.

She presented her project to the class.

Wael did his science project on tidal power.

He presented his project to the class.

Both children presented their projects on Tuesday.

Neither of the children was nervous about their presentations.

Each of the children practiced their presentations at home.

At the end of the presentation, someone raised their hand to ask a question.

2 **Look at Exercise 1. Complete the rules with one word**

1 Use ____________ when the noun is a boy.
2 Use ____________ when the noun is a girl.
3 Use ____________ when it's not important, or we don't know if the noun is a boy or a girl.
4 Use ____________ when the noun is plural.

3 **Complete the gaps with the correct words**

Amir and Amira are twins. They worked together and did 1 ____________ science project on renewable energy.
They presented 2 ____________ project to the class on Thursday.
Amir presented 3 ____________ part on solar power.
Amira presented 4 ____________ part on wave power.
Both children did a good job in 5 ____________ presentation.
Neither of the twins forgot what they wanted to say in 6 ____________ presentation.
No one raised 7 ____________ hand to ask any questions.

4 **You're going to listen to a job interview. You will hear these words. Match the words to the definitions before you listen. You can use a dictionary to help you**

1 experience
2 a skill
3 a talent
4 a career
5 to train someone
6 a promotion

a to teach someone how to do a job
b all of the different jobs that a person does in their life
c when you get a higher position where you work
d something that you do well naturally
e the ability to do something well after practice and training
f knowledge or practice of doing something

5 **Listen to the interview. Circle the correct words to complete the sentence**

Mariam is applying to be a **tidal turbine / solar panel / wind turbine** engineer.

6 **Listen to the interview again. Read and write *T* (True) or *F* (False). Correct the false sentences**

1 Mariam worked in Kenya for 5 years. ☐

2 She learned about computer programming at her last job. ☐

3 Mariam says one of her talents is being calm. ☐

4 They will train Mariam for 1 week. ☐

5 Mariam can get a promotion after 2 years. ☐

Find out

Where is the Ras Gahreb wind farm?
How big is it?

UNIT 5

LESSON 5
TEAMWORK

1 **Why do you think these ideas are important when working in a team?**

Be responsible | Collaborate | Solve problems | Have a positive attitude | ~~Communicate~~

2 **Now read and match the ideas from Exercise 1 with the paragraphs**

How to Be a Good Team Member

Teamwork is very important for the success of a project. Here are 5 points to remember when you're working in a team.

1 Communicate - Share your ideas and feelings with the other team members. You should be open about how you're feeling about a project. Remember to be sensitive to how others might feel. You should be polite too.

2 ____________ - Actively work together with your team members to get the best results. You might have a good idea, but make sure to listen to others' ideas too.

3 ____________ - Remember to complete your part of a project. Your team members are relying on you to do your part. If you're finding your role difficult, ask for help.

4 ____________ - Instead of getting worried about problems, be a problem solver. Brainstorm many different solutions to the problems with your team members and agree on the best solution.

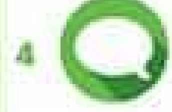
5 ____________ - There might be some difficult times when working together. Stay calm and don't get upset. If you are positive, you'll help yourself and the other team members be more successful.

3 **Here are some more important ideas to remember when doing teamwork. Order them from 1 (the most important) to 5 (the least important)**

Be supportive ____________ Be flexible ____________

Be reliable ____________ Show respect ____________

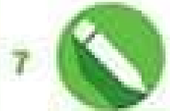
Say when you're wrong ____________

4  **Work with a partner. Think again about all of the ideas for being a good team member. Decide which is the most and the least important**

5 **Read the email to apply for a job. What type of job is it for?**

6 **Read the email again. Answer the questions**

1. Who is writing the email?
2. Who is the email for?
3. Why is he writing the email?

7  **Read the job advertisement. Write an email to apply for the job**

We are hiring engineers!

We are looking for engineers to design vehicles that run on renewable energy sources. Are you interested in clean energy? Are you creative? Then contact:

Mr. Ramy Bakhoum, Rambakh@mail.com

Writing tip!

Remember to add the email address of the sender. Start with 'Dear -------,' and end your email with 'Yours sincerely,'.
Say what you want to write about in the main part.

UNIT 5

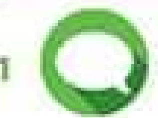
LESSON 6
PROJECT

1 **Read the text and underline what you have to do**

It's time for you to become a designer of an eco-friendly vehicle. You can choose to design a vehicle for individual use, such as a car, a motorcycle, or a boat. Or you might decide to invent a vehicle for public transportation, like a ferry, a bus, an airplane, or even a spaceship. But your vehicle must run on at least one renewable energy resource. Explain why it's eco-friendly. Remember to use your imagination and creativity!

2 **Draw a picture of your vehicle here. Label the different parts of it**

REVIEW

1  **Work with a partner and explain the difference between:**

- renewable and non-renewable resources
- fossil fuels and renewable energy sources

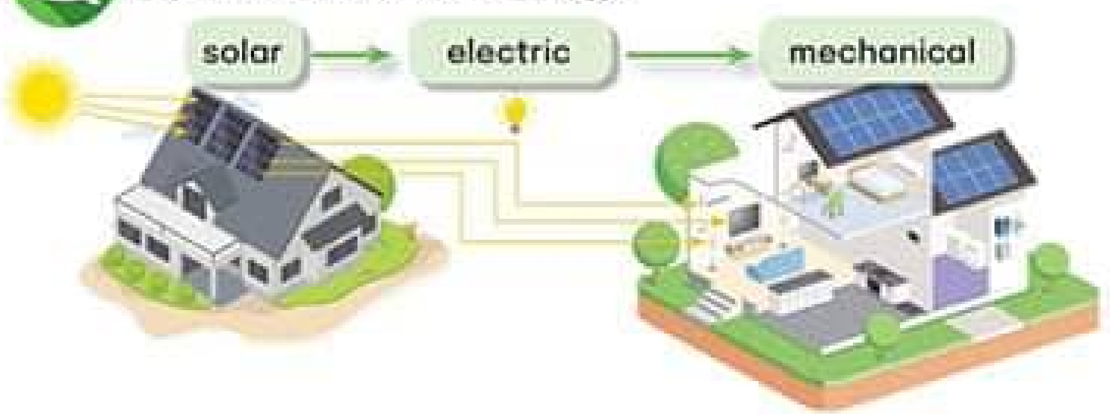
2 **Write the third person singular form of these verbs**

go mix wash watch eat pass play study work do

---

3 **Explain the transfer of energy.**

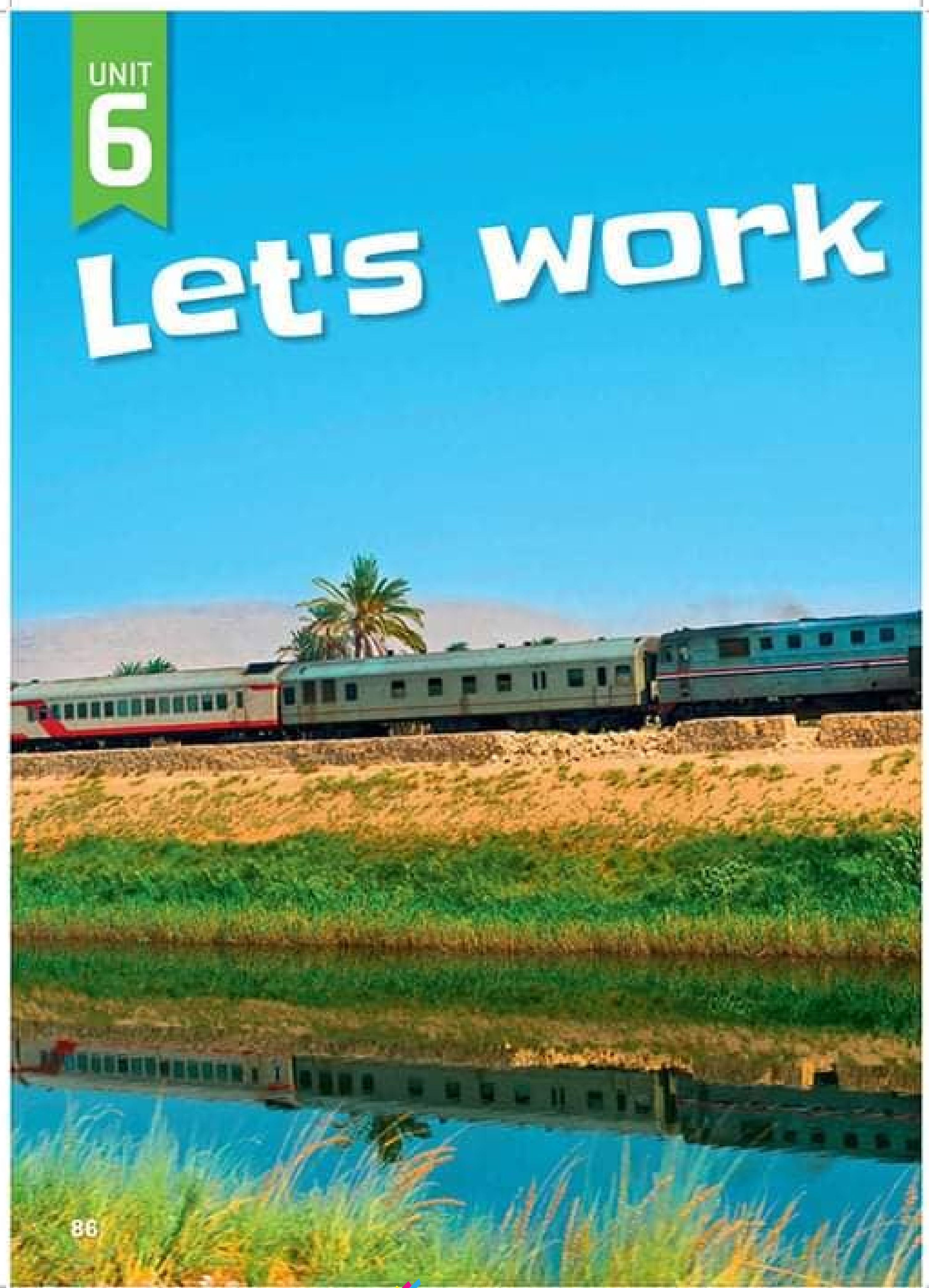
solar → electric → mechanical



SELF-ASSESSMENT

4 **Check (✓) the boxes that are true for you**

- I can understand the difference between renewable and non-renewable resources. ☐
- I can identify fossil fuels and the problems with them. ☐
- I can use the correct form of third person singular verbs. ☐
- I can explain different types of renewable energy sources. ☐
- I can match and correctly use pronouns. ☐
- I can recognize and use vocabulary related to jobs. ☐
- I can be a good team member. ☐
- I can write an email to apply for a job. ☐
- I can design a vehicle that runs on a renewable energy source. ☐


UNIT
6
Let's work

In this unit I will ...

- talk about different kinds of transportation.
- make predictions about the future.
- understand future tech jobs.
- use punctuation marks.
- learn to use search engines on the internet.
- create strong passwords and passphrases.
- write a well-organized paragraph.
- create a business plan.

Look and discuss

1 Where can you travel to on a train?

2 What kinds of goods can we transport with trains?

Did you know?

The first train line in Egypt opened in 1854. It traveled from Cairo to Alexandria .

Find out

What different kinds of transportation do we have in Egypt?

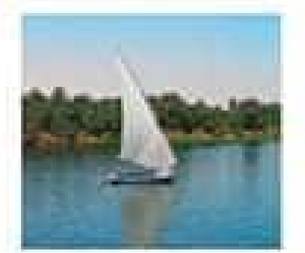
Why do we use different kinds of transportation?

UNIT 6

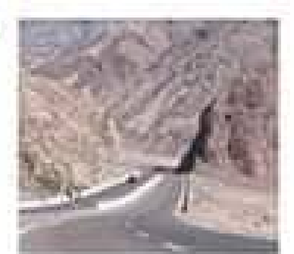
LESSON 1 TRANSPORTATION

1 **Match the words to the pictures of different kinds of transportation**

air pipe rail road water

1 

____

2 

____

3

____

4

____

5

____

2 **Listen to these children talking about transportation. Write the transportation they talk about**

_______________ _______________ _______________ _______________ _______________

3 **Listen again and complete the sentences**

1 **Adam:** He likes to sit next to the _______________.
2 **Amira:** People in new desert towns will get water from a _______________.
3 **Maged:** The government will build new electric _______________.
4 **Lamar:** Ancient Egyptians used different kinds of boats and _______________.
5 **Fares:** His family stopped in towns for _______________ and _______________.

4 **Listen, read, and say**

1 Have you ever been on a train? Where did you go?
2 Have you ever traveled on an airplane? What was it like?
3 Have you ever been on a bus? Where did you go?
4 Have you ever taken a river ferry? Was it fun?
5 Have you ever traveled on a ship? What was it like?

5 **Complete the table for you. Use a (✓) for *Yes* and a (✗) for *No***

Have you ever traveled on ... ?	Me	My partner: ______
a train		
an airplane		
a bus		
a river ferry		
a ship		

6 **Work with a partner. Ask and answer**

- Remember to use the extra questions in Exercise 4 if they answer *Yes*.
- Write their answers in the table in Exercise 5.

Tip!

You can answer with short answers: (✓) *Yes, I have* or (✗) *No, I haven't*.

Did you know?

The Suez Canal is now 193 kilometers long, 205 meters wide, and 24 meters deep. It was started in 1859 and it took ten years to finish it.

UNIT 6

LESSON 2 LANGUAGE

1 Read these sentences. Are they about the past, the present, or the future?

People **will** travel to Mars for vacation in 2052.

My parents **won't** buy a self-driving car next year.

Airplanes **will** use solar energy in the future.

2 Do you think the predictions in Exercise 1 are *true* or *false*?

3 Match the sentence with the descriptions

1 I **will** take a flying taxi to school.	a Negative sentences
2 Robots **won't** drive trains next year.	b Short answers
3 **Will** you travel to the Moon one day?	c Positive sentences
4 Yes, we **will**. / No, we **won't**.	d Questions

4 Order the sentences. Listen and check

1 take / Aswan / train / to / Will / they / a / ?
2 a / ship / travel / on / She / will / .
3 the / sit / won't / window / by / Amir / .
4 the / people / in / flying cars / Will / use / future / ?
5 airplanes / fly / in / will / 2064 / Robots / .
6 Mars / won't / day / on / one / I / live / .

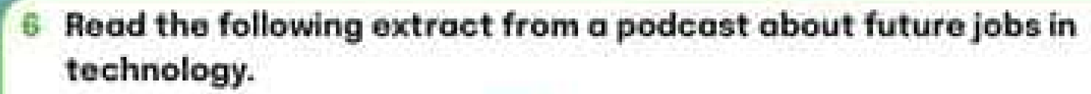
5 Work in groups. Discuss the questions

1 Will people travel in airplanes and cars that use petroleum in the future?
2 Will humans live on or travel to another planet one day?
3 How will you use English in the future?
4 What will you do when you're an adult? Where will you live?

Extra challenge!

Can you write the contractions? Follow the example

1 I will = I'll ________ 2 We will = ________
3 He will = ________ 4 They will = ________
5 She will = ________ 6 You will not = ________



6 **Read the following extract from a podcast about future jobs in technology.**

Underline the comma (,) in red

Underline the apostrophe (') in blue

Underline the question mark (?) in orange

Underline the period (.) in green

'The world is changing and changing fast, but what does that mean for your life, education and career? Hello and welcome to the podcast Life on Future Earth. I'm your host, and today we'll be talking about three tech jobs that people will do in the future.'

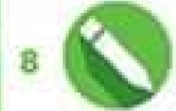
7 **Match the punctuation marks to what they do**

1	,	a	at the end of a sentence
2	.	b	for contraction of a word
3	?	c	joins two ideas in a sentence
4	'	d	at the end of a question

Writing tip!

The exclamation point (!) shows strong feelings or emotions.

The new electric train is very fast! It can go 250 kilometers per hour.



8 **Write the missing punctuation in these sentences**

1 We want to visit Aswan this year but it's very far away from where we live in Cairo.
2 The government will build three bridges in Alexandria Cairo and Suez.
3 I ll show you a picture of Tutankhamun's royal ship tomorrow.
4 Have you ever been to the Valley of the Kings
5 It really was an interesting video
6 We re studying the Ancient Egyptians at school. They are amazing

Tip!

We use *pre-* at the start of words in English to mean 'before'. For example, 'predict' means to say something before it happens. What do these words mean? Use your dictionary to check.

preview prepay pre-school

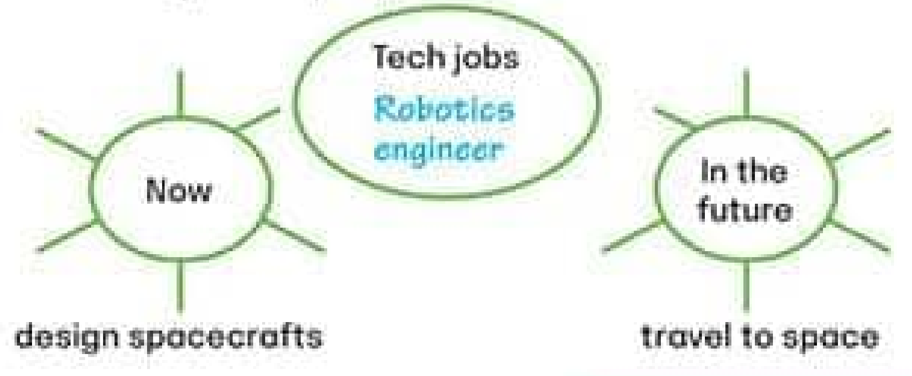
Can you find any other words which start in this way?

UNIT 6

LESSON 3
TECH JOBS OF THE FUTURE

1 **Work in groups. Brainstorm answers to the questions. Write your ideas in the diagram**

- What kind of tech jobs do people do now?
- What kind of tech jobs will people do in the future?



2 **Listen to a podcast about future jobs in technology. How many jobs does Gameela talk about?**

______

Tip!

Tech is short for *technology*.

3 **Listen to the podcast again and write *T* (True) or *F* (False)**

1 UX is short for User Excitement. ☐

2 UX designers create positive experiences with technology. ☐

3 VR is short for Very Real. ☐

4 VR headsets are only used for playing games. ☐

5 Autonomous machine is another name for a robot. ☐

6 Gameela says that people will use robots on farms, in factories, and in schools. ☐

4 **Work in pairs. Discuss these questions**

1 What special skills do people need to do these jobs?

2 Which job would you like to do? Why?

USING SEARCH ENGINES

5 Use a dictionary to find out what these words mean. Write a definition. Compare with a partner

search engine (noun) ______

look up (verb) ______

link (noun) ______

browser (noun) ______

ad (noun) ______

specific (adjective) ______

6 Listen and put the topics in order

a specific words ☐
b ads ☐
c the words *for kids* ☐
d the options in the search box ☐
e the safe search option in your browser ☐
f search engines that are made for children ☐

7 Listen again and circle the correct word

1 You should use the (child / school / safe) search option in your browser.
2 There are special search engines for (school / teachers / children).
3 You will see the ads (first / in the middle / last). Ignore them!
4 Choose the (first / best / last) option in the search box.
5 To get the best search results, use (short / long / specific) words.

Did you know?

There are more than a billion web pages on the internet.

UNIT 6

LESSON 4
CLIL: ICT
PASSWORDS AND PASSPHRASES

1 Discuss these questions.

1 When do you use passwords?

2 Why is it important to create strong passwords?

2 Here is some information about some ways to create a strong password or passphrase. Which idea for creating passwords and passphrases do you like best? Why?

How to Create Strong Passwords and Passphrases

First of all ...

Don't use personal information like names, birthdays, phone numbers, or addresses.

Don't use easy or obvious words, like *Password* or *Computer*, or series of numbers, like *1234*.

Don't use less than 10 **characters**.

Don't use the same password for different accounts.

And **don't** tell your friends your passwords.

Create a passphrase (Passphrases are much safer than regular passwords.)

1 Choose four different words that you can remember: mouseferryamazingfootball

2 Add spaces to make it stronger: mouse ferry amazing football

3 Use some capital letters: mouse FERRY amazing football

Create a personal password code

1 Think of your favorite color: green

2 Add a number: green87

3 Add your favorite school subject: green87science

4 Add a symbol: green87$science

Create a password sentence

1 Think of a sentence that means something for you: My beautiful pet cat is named Bes

2 Use the first letter of each word: MbpcinB

3 Add numbers and characters you can remember: MbpcinB*49&

3 **Use the information above to create your own pretend passwords and passphrases**

Create a strong passphrase:

Create a strong personal passcode:

Create a strong password sentence:

UNIT 6

LESSON 5

1 Look and write. Use a dictionary to help you

2 Read and answer. Where did Amr's ship come from?

A fun job!

Suez Canal

Heba looked out of the window of her family's house at the ships going along the **Suez Canal**. They were so big.

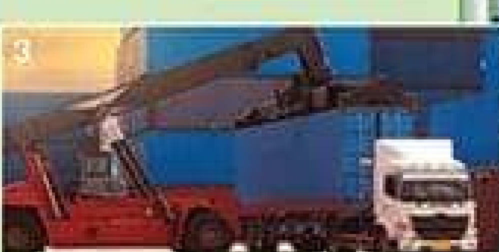
'It must be so fun to be a **ship's captain**!' thought Heba. 'The ship moves so slowly. I think it's a relaxing job.'

Heba loved watching the ships. She often watched them with her friends. She liked to think about where the ships came from.

One day, Heba's father said, 'My friend, Amr, works on a container ship. He will travel past our house today. Let's go and **wave** at him'

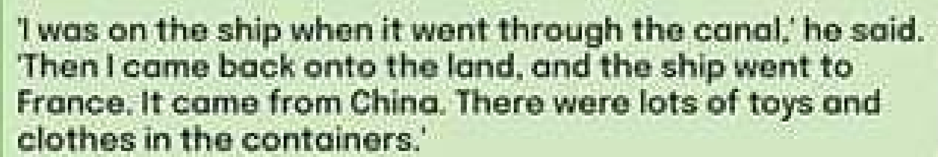
Heba and her family went to the side of the Suez Canal and waited for Amr's ship. It was huge and had hundreds of **containers** on it.

'Where is the ship going?' asked Heba.



'You can ask Amr next week,' answered her father. 'He will come and visit us then.'

When Amr came to visit Heba, she had a long list of questions to ask him. He laughed and agreed to answer them all.



'I was on the ship when it went through the canal,' he said. 'Then I came back onto the land, and the ship went to France. It came from China. There were lots of toys and clothes in the containers.'

'Is it fun on the ship?' asked Heba.

'It's very hard work!' answered Amr. 'The captain has to drive the huge ship for a long time. The ship has to be straight. Sometimes it is very difficult when it is windy. Would you like to come and visit a ship one day?'

'Oh, yes please!' answered Heba.

WRITING: HOW TO WRITE A PARAGRAPH

3 Read again and answer

1 Where does Heba live?
2 What does Heba think about a ship captain's job at the start of the story?
3 What does Heba learn about a ship captain's job at the end of the story?
4 What is in the containers on Amr's ship?

4 What do you have to do to write a paragraph? Put the steps in order 1-6

a Write the main information of the paragraph. ☐
b Do research to find out facts about the topic. ☐
c Write a conclusion sentence. ☐
d Write an introduction sentence. ☐
e Brainstorm some ideas. 1
f Put your ideas in order. ☐

5 Read this question. Work in groups. Brainstorm some ideas about it

Write a paragraph about the following question: How can people transport natural resources across a desert? Include ways that are environmentally-friendly. Use at least 50 words.

6 Write your paragraph

____
____
____
____
____

Tip!

Environmentally-friendly ways are ways that don't harm the environment.

7 Exchange paragraphs with your classmates. Did you have the same ideas?

Writing tip!

Remember to start your paragraph with an introduction sentence and end it with a conclusion sentence.

UNIT 6

LESSON 6
Project

1 **Read the text and choose the correct words**

The Young Entrepreneurs

1 **An / A** entrepreneur is someone who 2 **start / starts** a new business. In this project, you are going to work with a group of classmates and start 3 **your / their** own business. First, you need to decide what goods you will sell, 4 **but / or** what services you will offer. Then, you have to decide where you will sell your goods or offer your services. Finally, you will 5 **make / do** a poster to help explain your business plan.

2 **Use this chart to help you plan. Look and complete**

What is the name of your business?	
What is your product or service?	
Why do people need it?	
Will you need to transport your goods?	
Will you need to use transportation to get to work?	
What kind of transportation will you use? Is it good for the environment?	
Any other information?	

3 **Practice presenting your business plan with your group**

REVIEW

1 Write the names of 4 types of transportation

- ______________
- ______________
- ______________
- ______________

2 Make two predictions about the future. Use the words in the box

will won't

1 ______________

2 ______________

3 Punctuate these sentences and use capital letters correctly

1 Don't use personal information like birthdays phone numbers or addresses to create a password.

2 I always wanted to go to fayoum because I love archaeology

3 When the search engine shows you your results you will probably see some ads too.

3 Have you ever tried playing a virtual reality game

4 We ll use robots to do jobs that are too dangerous or difficult for humans to do.

5 Did you know that these trains can go 250 kilometers per hour That's pretty fast

SELF-ASSESSMENT

Check (✓) the boxes that are true for you

- I can talk about different kinds of transportation. ☐
- I can make predictions about the future. ☐
- I can understand future tech jobs. ☐
- I can use punctuation marks. ☐
- I can create strong passwords and passphrases. ☐
- I can write a well-organized paragraph. ☐
- I can create a business plan. ☐

REVIEW 2

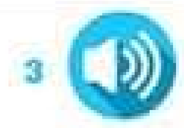
LESSON 1

1 **Read and play a memory game**

1 Draw the table in your notebook.
2 Look at the pictures for one minute.
3 Close your books.
4 Write or draw as many of the words as you can.
5 Check with your partner.

1 ______	2 ______	3 ______
4 ______	5 ______	6 ______
7 ______	8 ______	9 ______
10 ______	11 ______	12 ______
13 ______	14 ______	15 ______

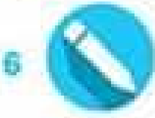
2 **Now write the words**

3  **Listen and point**

4 **Look, sort and write**

solar coal wind crude oil wave petroleum tidal natural gas

Renewable energy sources	Non-renewable energy sources

5  **Look and complete, then listen and check**

blades electrical energy transfer ~~wind~~ turbine

The 1 ___wind___ turns the 2 ________ . The blades have 3 ________ and they move.
The wind 4 ________ changes the movement energy into 5 ________ energy. This is called 6 ________ of energy.

6 **Read and answer**

1 There are 12 farmers in Ali's village. Each farmer has 20 goats. How many goats are in Ali's village?

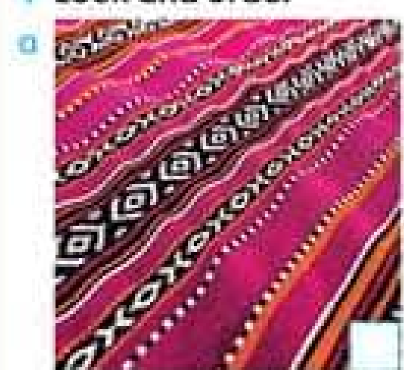
____

2 The weavers made 150 carpets last year. They sold the carpets at 5 different markets. How many carpets did they sell at each market?

____

LESSON 2

1 Look and order

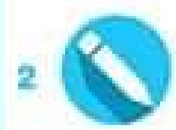
a

b

c

d

e

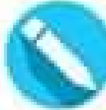
f


2 Listen and check

3 Write the plural of these words in the table

~~brother~~ buffalo carpet child date
goose man potato sheep tomato

-s	-es	Plural is the same as the singular	Other irregular plurals
brothers			

4  **Work with a partner. Think, discuss and write**

1 What can you use to find out information online?

____

2 How can you stay safe online? Give 3 ideas

____

____

____

3 To get the best search results online, use specific words. If you want to find information about these topics, what words can you use?

a Fish and other animals which live in the Red Sea

____

b Museums, shops and other places to visit in Alexandria

____

c People who make traditional carpets in Egypt

____

5 **Write these sentences with the correct punctuation and capital letters**

1 there are more than a billion web pages on the internet that's amazing

____

2 what does a ship's captain do

____

3 UX designers make sure that technology is safe, friendly and useful for all users

____

4 there is so much information online, but it's sometimes difficult to find the right information

____

5 we wont take an airplane to alexandria We ll go by train

____

PRESENTATION

1 Weave a carpet

You will need:

string

a piece of cardboard

scissors

colorful yarn

tape

1. Cut small cuts at both ends of the cardboard. The cuts can be 1cm apart.
2. Tape 1 end of the string to the back of the card. Bring the string to the front through the first cut. Take it to the bottom and through the first cut there. Continue through all the cuts to make the warp of the carpet. Tape the string to the back of the cardboard.
3. Choose some colored yarn and cut about 1 meter. Take 1 end of the yarn under the first warp thread and over the next warp thread. Continue in the same way across the loom.
4. When you finish weaving your piece of yarn, you can choose another piece of yarn.
5. Finally, cut your warp off your loom. Tie each warp string to the next string to finish your carpet.

2 Work in groups. Present your carpet to your group

Talk about:

- What did you make?
- How did you make it?
- Which colors did you choose?

I made a carpet. I used colored yarn and I chose blue, yellow, and red.

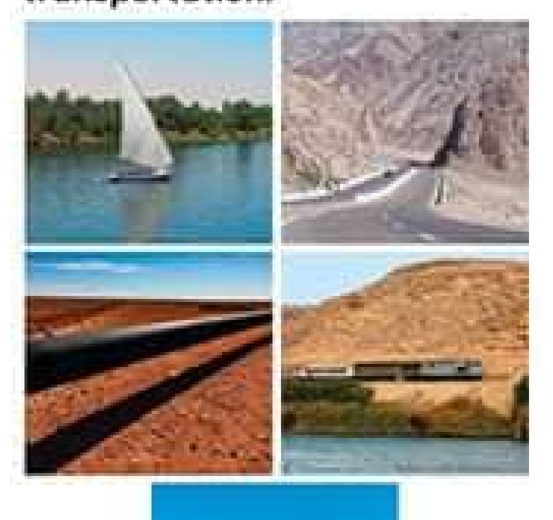
SELF-ASSESSMENT

Now I can ...

1 talk about rural and urban places.

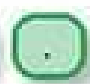
2 talk about renewable and non-renewable resources.

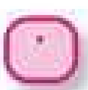
3 talk about different kinds of transportation.



4 use irregular plurals: *children, men, geese, sheep, tomatoes*

5 use punctuation marks correctly.





TERM 1 PROJECT

1 Work in a group. Read and think about the project

Future jobs

Choose a job that you think is interesting. Find out information about that job. Think about the following questions:

- What does someone with this job do?
- What industry is this job in?
- How does this job help people?
- What tools do you need to do this job?
- What special skills do you need to do this job?
- How will this job be different in the future?

2 Think and check

Where can you find out information about this job?

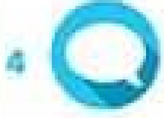
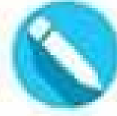
Books ☐

The Egyptian Knowledge Bank ☐

Interviewing people ☐

3 Do some research and write what you learned

K What I know	W What I want to know	L What I learned

4   **Discuss, plan and write**

How can we present our work? What will we say?

____

____

____

5 Work in a group. Present the job to the class

6 Read and check

It is important to work well in a group. These are some ideas to remember when working with a group. Think about how you worked with your group today. What did you do?

Be responsible	☐
Communicate clearly	☐
Solve problems	☐
Have a positive attitude	☐
Be supportive	☐
Say when you are wrong	☐
Show respect to other people	☐
Be flexible	☐

7 Think and write

1 What did you do well when you worked in a group today?

2 What will you do better when you work in a group again?

KHAYAMEYA SUMMER

BY MOIRA DUTTON
ILLUSTRATED BY NATHALIE ORTEGA

PICTURE DICTIONARY

artisan

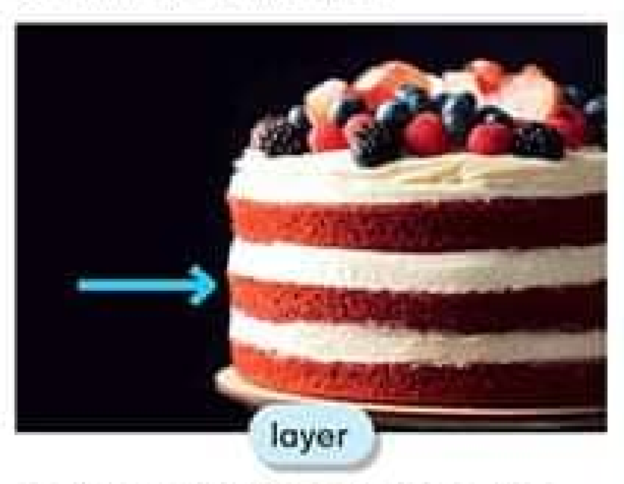
Some artisans make tables and chairs from wood.

geometric pattern

We can sometimes see a geometric pattern of colorful tiles.

lotus flower

Lotus flowers grow on rivers and lakes.



layer

There are 3 layers of cream in this cake.

sew

My grandmother can sew her own clothes.

stitch

I need 4 stitches to fix this button.

Zeinab was bored. It was the second week of the summer holiday.

Zeinab said, 'Let's go visit Grandpa!'

Her mother said, 'Yes, he's sad at the moment. I think you can help him.'

Zeinab got off the train. There was her grandfather and grandmother!
Her grandparents were very pleased to see her.

After tea, Grandpa said, 'My eyes are not very good now. It's difficult to work. I can't see to **sew**. I think I will have to stop making things.'

Grandpa was one of the Tent Makers. He was one of the best **artisans** in Khayameya Street.

Zeinab said, 'Oh no! You can't stop! You make such beautiful things!'

Zeinab and her grandfather visited the shop.

Zeinab said, 'Oh look! I love this big picture with all the flowers! Did you make it, Grandpa?

'Yes, it took me nearly four months. It's made of thousands and thousands of small **stitches**. I measured and cut all the pieces by hand,' said Grandpa.

'All by hand? That's amazing!'

'What's your favorite design Grandpa?' asked Zeinab.

'I like sewing **lotus flowers** and **geometric patterns** best, and I also like sewing birds. I used my best stitching on the patterns, but my eyes are not good now. It is sad for me.'

'I wish I could sew and help you,' said Zeinab.

Her grandfather smiled. 'I can teach you. Do you want to learn?'

'Oh, yes please!' said Zeinab.

Zeinab asked, 'How did you learn to sew, Grandpa?'

'My father taught me. When I was a child, I wanted to be an engineer or a teacher, but I **changed my mind.** My father taught me to sew. My grandfather taught my father before that! I became a Khayameya artisan, and I love my job,' answered Grandpa.

Zeinab said, 'You design and measure the patterns. You choose the colors. I think you are an engineer, an artist, and good at math! And now you are my teacher, too.

Zeinab said, 'Grandpa, I have an idea. My friends are very clever. I think they want to learn about Khayameya, too.

Rasha is great at math and working out problems. Lobna invents things all the time and has good ideas. Doha makes amazing art and Engy can help you show us all how to sew. She makes beautiful things.

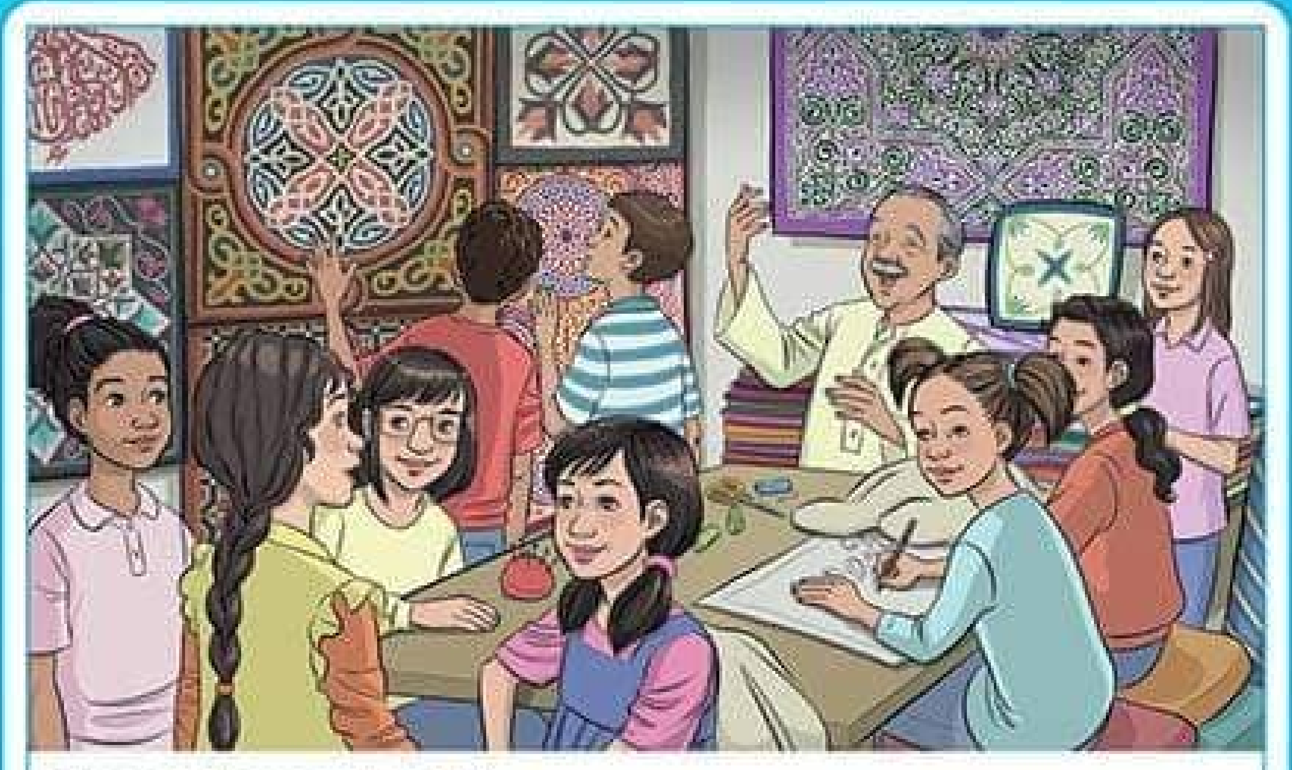
Let's call them!'

Zeinab's friends arrived.

'We're here! Let's learn something new.'

Grandfather said, 'Welcome girls. Thank you for coming! We make the patterns with three **layers** of cotton and put them together like this ....'

Grandfather said, 'Zeinab you have such clever friends! What a good idea!'
Rasha answered, 'We like learning new things, and we have a great teacher!'



Other people came to watch.
They said, 'That looks fun. Can we try?'
Zeinab's grandfather said, 'Welcome! Come and join us!'

Grandpa said, 'Zeinab, look at all these people! They all want to learn about Khayameya! I'm so happy!'

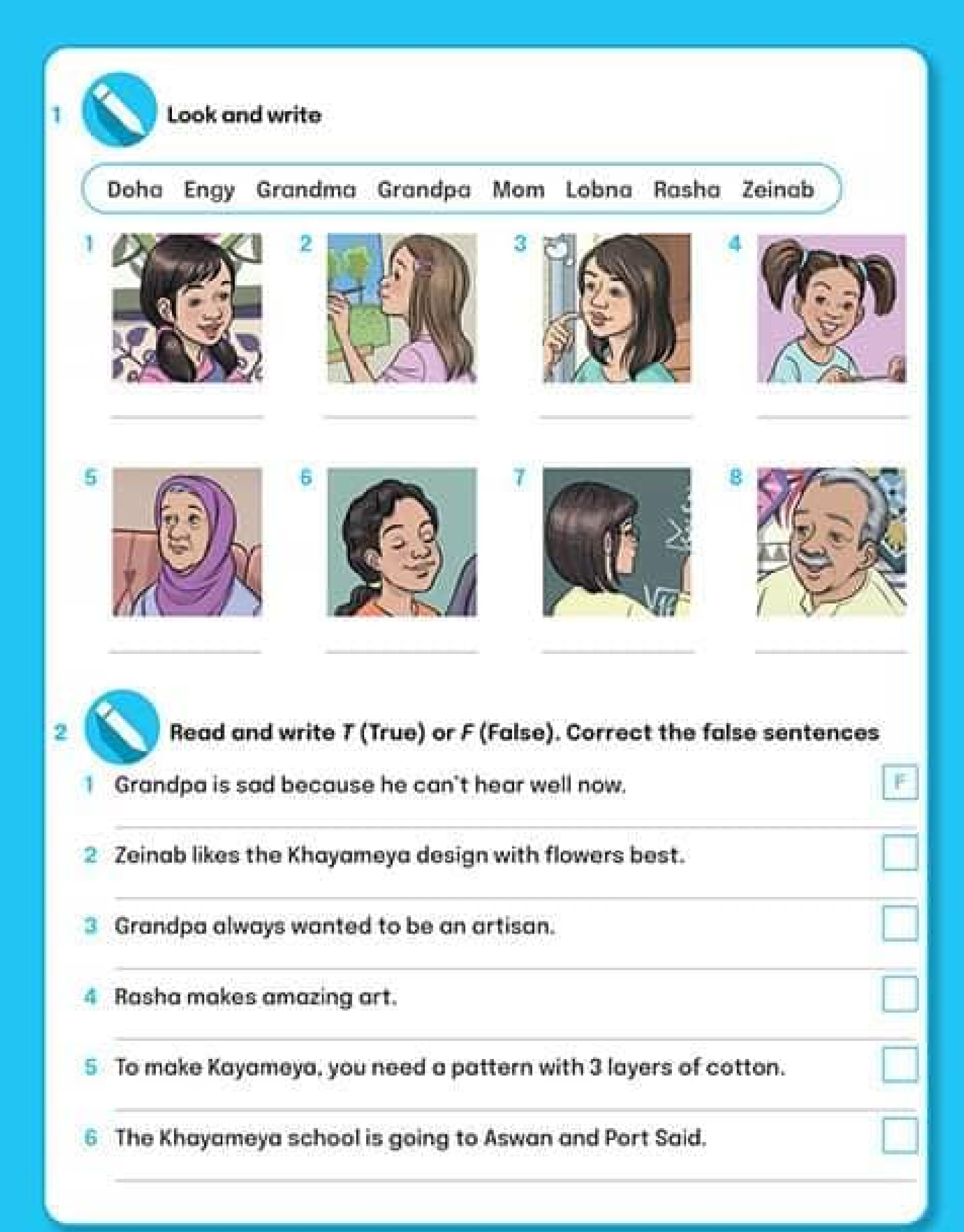
Zeinab said, 'Lots more people want to learn too. People in many places all around Egypt want you to teach them.

Khayameya School is traveling all summer! Next, we are going to Ismailia, then Tanta and Marsa Matrouh! What a wonderful summer holiday! Thank you, Grandpa!'

Grandpa laughed, 'No, thank you Zeinab!'

1 Look and write

Doha Engy Grandma Grandpa Mom Lobna Rasha Zeinab



1 ______ 2 ______ 3 ______ 4 ______

5 ______ 6 ______ 7 ______ 8 ______

2 Read and write *T* (True) or *F* (False). Correct the false sentences

1 Grandpa is sad because he can't hear well now. F

______

2 Zeinab likes the Khayameya design with flowers best. ☐

______

3 Grandpa always wanted to be an artisan. ☐

______

4 Rasha makes amazing art. ☐

______

5 To make Kayameya, you need a pattern with 3 layers of cotton. ☐

______

6 The Khayameya school is going to Aswan and Port Said. ☐

______

3 **Look and number**

1. I think I will have to stop making things.
2. Zeinab, look at all these people! They all want to learn about Khayameya! I'm so happy!
3. I wish I could sew and help you.
4. Let's go visit Grandpa!
5. I measured and cut all the pieces by hand.
6. My friends are very clever. I think they want to learn about Khayameya, too.

a b c d e f

4 **Did you like the story? Why? Ask and answer**

Did you like the story?

Yes, I did. It is interesting to learn about Khayameya.

5 **After the summer, Zeinab writes an email to her grandfather. Complete her email**

Remember to say:

- what you enjoyed.
- what you learned.
- what you want to do in the next holiday.

Hi Grandpa,
Thank you for a wonderful summer holiday!

____
____
____
____
____

See you soon.
Zeinab

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